Local Water Done Well Review

Southern Water Done Well Working Group

March 2025

Document status

Job #	Version	Written	Reviewed	Approved	Report Date
2990	DRAFT	S.Cross and J Williams-Shigeeda	D.Bonifant	D.Bonifant	6 March 2025
2990	DRAFTv2	S.Cross and J Williams-Shigeeda	D.Bonifant	D.Bonifant	19 March 2025
2990	FINAL	S.Cross and C.Murray	D.Bonifant	D.Bonifant	28 March 2025

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Executive summary

This report builds on the work completed earlier by the Otago and Southland Local Water Done Well Working Group, which laid the foundation for identifying the preferred regional three waters delivery model. The previous report, dated October 2024, provided a comprehensive analysis that has been updated with new information from the Local Government (Water Services) Bill, guidance from the Commerce Commission, and updated financial modelling.

Morrison Low was commissioned to provide updated desktop analysis and context for the councils that have joined together to form the Southern Water Done Well Working Group (the Working Group). The group comprises of:

- Central Otago District Council
- Clutha District Council
- Gore District Council
- Waitaki District Council

The analysis includes consideration of the relative merits of establishing a wholly owned water services entity, a jointly owned water services entity and continued delivery of three waters services through an in house delivery model. The work has been competed in response to the Government's Local Water Done Well policy and is intended to assist the councils of the Working Group to identify a proposed model for future three waters service delivery in their communities.

The model for the delivery of three waters services across New Zealand has been the subject of successive reform proposals initiated by both Central Government and Local Government over the last 8 years. Challenges with the existing governance and management arrangements are well documented and have been the subject of a number of reviews. Many of these challenges relate to the funding and financing challenges that face the sector, and the need to respond to historical underinvestment in three waters infrastructure.

These issues are as prevalent among the councils of the Working Group as they are elsewhere in the country. Analysis of investment plans for the Working Group identifies a capital works programme of approximately $760 million through to 2034. This will result in a doubling of debt (on both a per capita and absolute basis) and water rates rises rising up to three fold for some water consumers.

This work identifies that the ongoing provision of three waters services will cost more for most communities under any delivery model. The level of investment in three waters services and the debt required to fund that is significant.

However, it is also clear that there are significant benefits that can arise through the adoption of a jointly owned water services entity. Specifically:

- All water consumers serviced by a Southern Water Services Entity (WSE) are likely to pay less for three waters services than they otherwise would through an in house delivery model.
- A Southern WSE will have improved financial and workforce resilience, due to its increased scale and geographic reach.

- Over time, it is expected that a Southern WSE will be able to provide better levels of service through improved investment planning, access to specialists, and ability to attract and retain good staff.
- The addition of a dedicated, professional board of directors, and a management structure with a sole focus on three waters service delivery will ensure that investment decisions are made with full consideration of the best for network outcomes, efficiency, and long term sustainability in mind.
- The transfer of three waters debt and revenue from most councils balance sheet will provide those councils with improved ability to invest in community infrastructure and deliver better placemaking outcomes for their communities.

In our view, this report highlights that there are clear benefits that arise from the establishment of a Southern WSE for all of the councils of the Working Group. However, this is unlikely to be without challenges, while on balance we consider a Southern WSE to be the best model overall, it should be noted that:

- Transition towards a regional price, if it is to occur at all, may result in increased three waters charges for some water consumers. The WSE is likely to adopt a principle that "no one pays more for three waters services than they otherwise would have under an in-house model for the same level of local investment". This may require the WSE to maintain separate pricing for an extended period of time.
- There is a risk that some local control is eroded. However, the level of control that will be able to be exerted by councils under the future in house delivery model will already be more limited than current arrangements.
- There may be a loss of high value jobs in some districts through a centralisation of functions. However the geographic reach of the entity will necessitate a local workforce, and modern working environments means the impact of this is likely to be limited.

Introduction

Morrison Low was commissioned to provide updated desktop analysis and context for the councils that have joined together to form the Working Group to assist in the assessment of a revised list of water service models: business unit, wholly owned WSE and a jointly owned WSE. At the time of writing, the group comprised of:

- Central Otago District Council
- Clutha District Council
- Gore District Council
- Waitaki District Council

The work builds on previous work commissioned by the larger Otago and Southland Local Water Done Well Working Group, which included a larger group of councils. This report should therefore be read in conjunction with the report for the Otago and Southland Local Water Done Well Working Group dated October 2024 (the earlier report).

This report focuses on a comparison of the relative merits of delivering water services through:

- An in house business unit with financial ringfencing
- A wholly owned WSE
- A regional WSE comprised of the member councils of the Working Group (Southern WSE).

Specifically, this updates the following sections of the earlier report based on information provided in the *Local Government (Water Services) Bill* (Bill 3) introduced at the end of 2024, new guidance issued by the Commerce Commission, further work carried out by the group, and updated financial modelling.

- Strategic objectives
- Shortlisted options revised to three as relevant to each council - in-house delivery, wholly owned CCO and a Southern WSE
- Financial modelling
- A multi criteria analysis of the future of water service delivery options available to each Council and the group.

Sections of note in the earlier report remain relevant particularly the case for change and the current state assessment work. These are not replicated in full in this report. This report is in Appendix Two - Local Water Done Well Review: Otago & Southland Three Waters October 2024**.**

The work is intended to assist the Councils' elected members to identify the future water services delivery options that it intends to take to the community for consultation in 2025.

Strategic context

The future delivery of three waters services across New Zealand faces challenges from a wide range of converging issues. However, these issues are typically able to be grouped into three common themes:

- A need for significant investment in infrastructure, including:
  - Long held resource consents nearing expiry
  - Ageing infrastructure and increased renewals investment requirements
  - The condition of assets
  - Increasing or changing regulatory standards and intervention
  - Changing demand
  - Climate related pressures including increased frequency of droughts and severe wet weather events.
- Increased financial constraints, including:
  - The need to significantly increase rates or other revenue that needs to be collected to fund service provision
  - A reduction in available borrowing capacity
  - The difficulty in funding significant infrastructure investment in small or remote communities.
- Challenges with the recruitment, retention, and development of skills, experience and expertise.

The districts represented by the Working Group are no different. Our analysis of the current state challenges for the four councils is summarised in the following section and appears in full (for the Otago and Southland councils) in the report at **Appendix Two** - Local Water Done Well Review: Otago & Southland Three Waters October 2024**.** The analysis identifies that:

- The four councils are facing a wave of investment required from a large number of expiring wastewater treatment consents, ageing infrastructure and significant population growth at a local level.
- A rapid increase in total borrowings to fund investment in three waters infrastructure across all councils. In some cases, councils which have historically held very low levels of debt are now projected to exceed borrowing limits that have been imposed by the Local Government Funding Agency (LGFA).
- Large rates rises for the ongoing provision of three waters services. The three waters residential rates in some areas are anticipated to increase up to three-fold over the next ten years.
- Our work in 2021 highlighted recruitment challenges across Otago and Southland, with vacancy rates in roles delivering water services averaging 13% across the two regions. Conversations with key staff through this piece of work have identified that recruitment and retention challenges have not improved significantly since that earlier work and we understand that these issues extend elsewhere in the country.

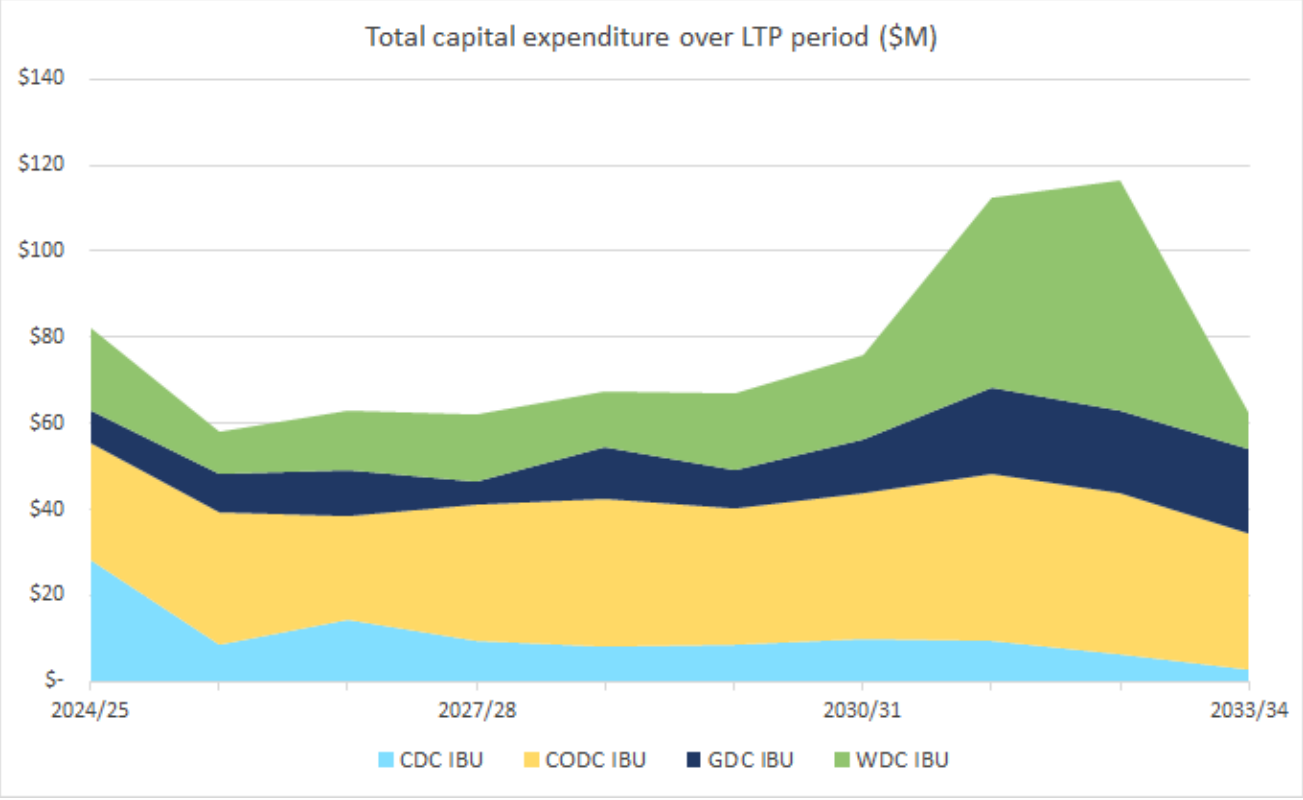
Further details of the current state of the case for change and the current state assessment can be read in the previous report in **Appendix Two** - Local Water Done Well Review: Otago & Southland Three Waters October 2024**.**

Investment requirements

The combined investment profile for the four councils features a $760 million programme of work over ten years, across four councils. The work programme consistently sits between $60 Million and $80 million through to 2031, increasing to between $112 million and $116 million across 2032 and 2033. The large increase in 2032 and 2033 relates to Waitaki District Council's wastewater rising main renewal and pipe relocations.

While there are a number of significant peaks for individual councils throughout the next ten years, the programme is very consistent across the councils. This may provide opportunities for a Southern WSE to better manage its capital delivery and provide a strong pipeline of work for contractors.

Figure 1 Combined capital expenditure programme of the four councils

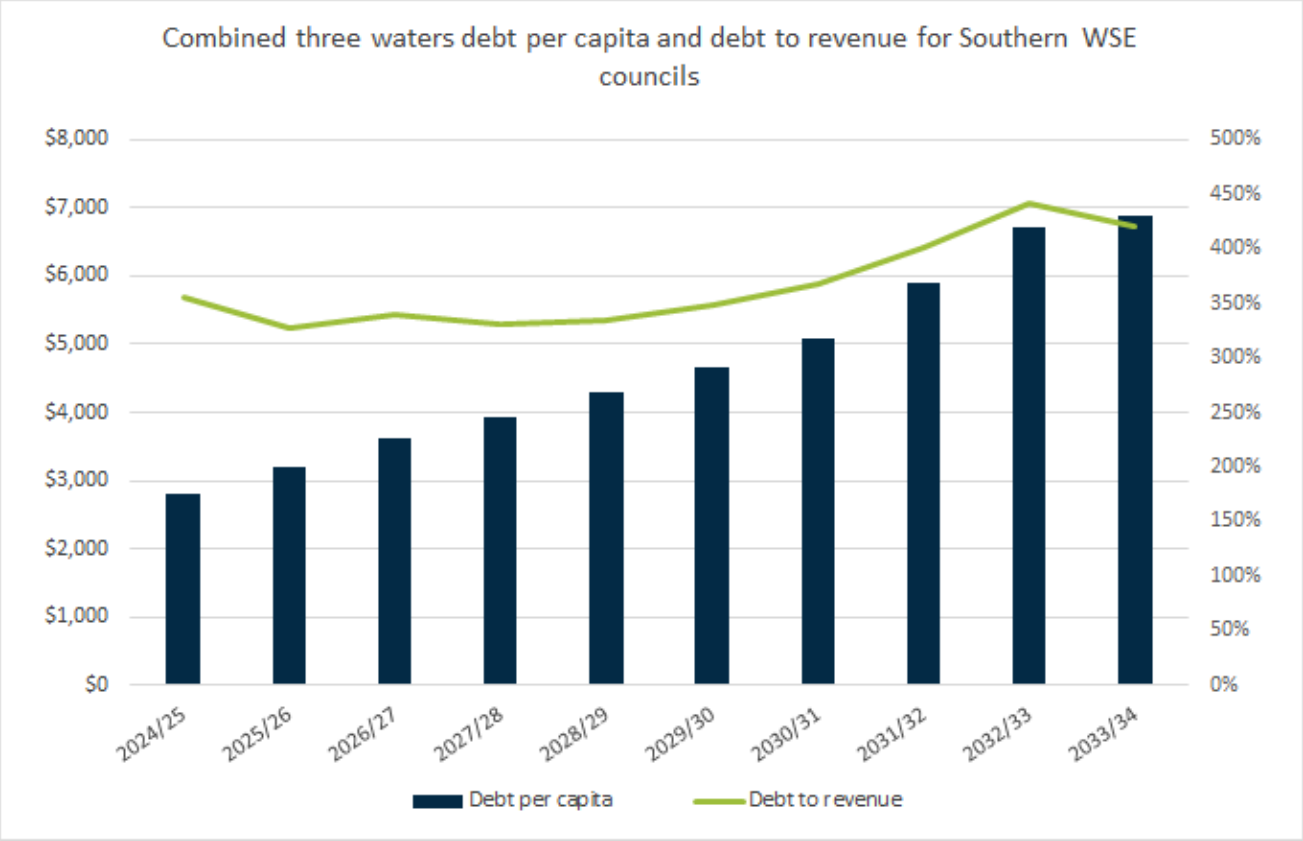


Borrowing requirements

Financing a $760 million dollar work programme requires significant borrowing. Our modelling shows the four councils are expected to borrow a combined $598 million by the end of the 2034 financial year, more than double the current combined debt of $236 million.

On a per capita basis, three waters debt across the combined regions is projected to double from $2,843 per person to approximately $6,926 per person in 2034.

Figure 2 Three waters debt per capita across combined four councils



In a letter to Councils of 20 December 2024 LGFA outlined its proposed borrowing arrangements. That letter clarified that lending covenants will not be based on a 500% debt to revenue threshold, but will instead be based on a "Free Funds from Operations" to debt ratio (FFO ratio). Based on conversations to date with LGFA, it is expected that a WSE would need to maintain an FFO ratio of 8% or higher. The implications of this for a Southern WSE are discussed later in this report.

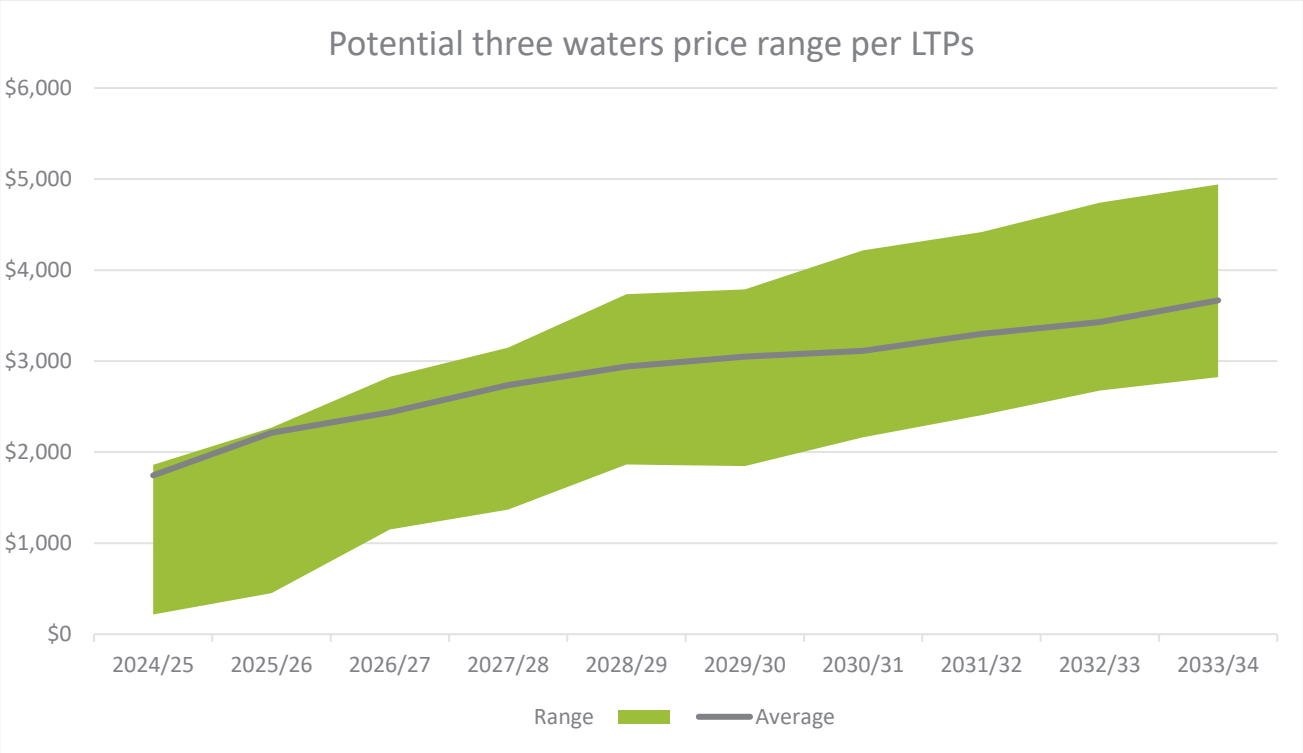
Rates rises

Three waters rates across the four councils are predicted to rise significantly over the next ten years. Based on long term plans, by 2034, some councils will have three waters rates that are more than three times larger than they are in 2025. For some councils, this means a rapid increase in rates in the final years of their Long Term Plans (LTP).

While there is significant variation across the regions, the affordability of three waters services and rates is likely to become a key consideration for all councils moving forward. Regionally, the weighted average[1] residential rates will more than double from $1,745 in 2025 to over $3,600 in 2034.

This may be compounded by the announcements made on 8 August 2024 that indicated a future economic regulator will have the power to set minimum and maximum levels of investment and revenue, thereby restricting councils ability to smooth investment and rating impacts.

Figure 3 Range of potential three waters rates rises across four councils



[1] The weighted average is the mean rather than median price. The mean price being on the lower end of the range indicates that there is a small group of water consumers paying the maximum charges, and that there is significant variation in charges across the four councils.

Economic and price regulation

The requirement on councils to develop Water Services Delivery Plans is part of the transitional arrangements (under The Local Government (Water Services Preliminary Arrangements) Act 2004). This information will then be shared with the Commerce Commission as it works towards implementing the indicated economic regulation regime.

The economic regulation regime is proposed under the Local Government (Water Services) Bill (Bill 3) currently before Parliament. This is expected to come into effect by mid-2025 and other aspects from 2026 (revenue thresholds, quality regulation, performance, price quality).

The settings for economic regulation are aimed at Water Service Providers (WSPs), including councils and WSEs who are responsible for making core decisions about capital and operating expenditure, revenue recovery, and charging levels.

The aim is to address water infrastructural challenges through influencing price and quality, protecting both consumer interests and promoting sufficient revenue recovery for investment and maintenance of water infrastructure.

This will apply firstly to all local government drinking water and wastewater services, with some flexibility on stormwater to be added at a later date.

This model is the extension of the existing economic regulation regime (which currently applies to electricity lines services, gas pipeline services, and airport services) in the Commerce Act 1986 to water services. The Commerce Commission (the Commission) will therefore be tasked with overseeing the economic regulation and consumer protection regime.

The Commission will be provided with a range of tools (enforcement and regulation-making) to ensure that WSPs providers collect sufficient revenue and make efficient investment decisions to maintain and develop infrastructure.

The Commerce Commission will have a number of options:

- Information disclosure: local government water services providers must disclose information to promote transparency and inform the need for further regulatory intervention.
- Revenue thresholds: revenue thresholds can be set by the Commission to ensure that WSPs collect enough revenue to operate, maintain and develop water infrastructure.
- Quality standards: the Commission can set specific standards and performance requirements for WSPs aimed at quality improvements.
- Price-quality regulation: a maximum or minimum revenue or pricing levels that WSPs can collect may be set ensuring that water services are delivered at a quality that communities expect.

The Commission will also enforce financial “ringfencing” where revenue collected for regulated water services (initially drinking and wastewater) must be spent on water services along with financial penalties available if breached. Noting the ringfencing is not by type of water, it is the waters package.

In support of this economic regime, the proposed consumer protection regime will require the Commission to monitor the treatment of consumers by WSPs. Where there are existing issues revealed in information disclosures a range of additional regulations on complaints, dispute resolution may be deployed alongside, service quality guidelines and mandated service quality codes.

Work commissioned by the Otago and Southland Local Water Done Well Working Group, and outlined in the earlier report, identified a preferred regional three waters delivery model to take the form of a multi-council owned, asset owning, CCO. The working group has not re-visited that initial assessment of shortlisted options, and confirmed through a joint meeting with mayors and chief executives that work should proceed on the basis that:

- The regional delivery model will be a jointly owned CCO
- The model should include all three waters
- Other structural options, such as full or partial ownership by a community trust, could be disregarded for now. The option to transfer ownership to a community trust at a later date will always remain.

Council members of the working group have yet to agree on their preferred delivery models for consultation. However, no alternative regional models are being considered, meaning this report deliberately focuses on the remaining options, being:

1. **Business unit**: In house delivery by council with financial ringfencing.
2. **Wholly owned WSE**: An individual Council-Controlled Organisation responsible for most elements of water services delivery. Each council would continue to set its own charges, manage its own debt, and agree a three waters budget.
3. **Jointly owned WSE:** A single WSE responsible for all elements of water services delivery. Councils would not own three waters assets, set charges or manage their three waters debt under a WSE model. Arrangements could be agreed around the approach to harmonising prices or ringfencing some debt.

To allow meaningful comparison of options a set of five strategic objectives was endorsed after refinement of those developed and endorsed by chief executives and mayors from the Otago and Southland region and were endorsed for adoption by the original four councils of the Working Group. The strategic objectives are reflective of the Government's Local Waters Done Well objectives and the regional challenges identified through a current state assessment. The endorsed objectives are:

1. To deliver three waters services in a way that reflects the importance of water to the health of our residents, visitors, environment and economy.
2. To deliver three waters services that sustainably respond to change in population, economic activity and climate change.
3. To deliver three waters services through a model that is responsive to the local needs of our communities.
4. To provide efficient and effective services through a model that supports robust decision making and the development of enduring capability and capacity.
5. To ensure that three waters services are delivered through a model that is enduring and financially sustainable.

Options have been assessed against these strategic objectives within this report.

Strategic objectives

Strategic objectives help guide the development and assessment of options. They summarise and reflect the critical elements of success, and the aspirations for improved water service delivery across the Otago and Southland regions.

Strategic objectives were developed having regard to the issues identified through the case for change. The strategic objectives outlined in Figure 4 were developed through workshops with the Otago Southland Local Water Done Well working group, and were presented to General Managers, and Chief Executives for challenge and refinement.

Figure 4 Investment objectives

Deliver three waters services in a way that reflects the importance of water to the health of our residents, visitors, environment and economy.

Deliver three waters services that sustainably respond to change in population, economic activity and climate change.

Deliver three waters services through a model that is responsive to the local needs of our communities.

Provide efficient and effective services through a model that supports robust decision making and the development of enduring capability and capacity.

Ensure that three waters services are delivered through a model that is enduring and financially sustainable.

The strategic objectives are explained further in Table 1 below. The objectives outlined in Table 1 include alignment to the four wellbeings to provide further clarity and context, and a level of detail or definition for each of the objectives that can then be used to assess the options.

Table 1 Strategic objectives alignment to four wellbeings

	Deliver three waters services in a way that reflects the importance of water to the health of our residents, visitors, environment and economy	Deliver three waters services that sustainably respond to change in population, economic activity and climate change	Deliver three waters services through a model that is responsive to the local needs of our communities	Provide efficient and effective services through a model that supports robust decision making and the development of enduring capability and capacity	Ensure that three waters services are delivered through a model that is enduring and financially sustainable
Economic Wellbeing 	• Three waters services and assets are resilient • Provision of reliable, continuous services	• Economic and population change is supported through the provision of infrastructure	• Services provision recognises the diversity in need for three waters infrastructure across our communities	• Scalable and adaptable • Maximises available efficiencies and encourages effective investment planning • Supports improved retention and recruitment • Systems and processes are robust and consistent across the regions	• Enough funding is raised (through charges, grants, debt or other means) to invest in needed infrastructure • The funding model allows for the ongoing, sustainable, provision of three waters services • We meet the requirements of an economic regulator
Cultural Wellbeing 	• Services respect the cultural significance of water and receiving environments • Service provision reflects our role as kaitiaki for the natural environment	• The intergenerational impacts of investment are considered	• A delivery model that allows for effective engagement with stakeholders	• Strong relationships are held with Runaka • Runaka are provided meaningful opportunities to contribute to decision making	• The financial capacity of councils to invest in community infrastructure is enhanced

	Deliver three waters services in a way that reflects the importance of water to the health of our residents, visitors, environment and economy	Deliver three waters services that sustainably respond to change in population, economic activity and climate change	Deliver three waters services through a model that is responsive to the local needs of our communities	Provide efficient and effective services through a model that supports robust decision making and the development of enduring capability and capacity	Ensure that three waters services are delivered through a model that is enduring and financially sustainable
Social Wellbeing 	• Public health is at the heart of decision making • Services will be compliant with all consents, regulatory standards and drinking water standards	• Communities are given access to three waters services that they need	• Investment in small communities is maintained • No community is left out	• The health and safety of our workforce and the public is protected • The model supports a highly coordinated emergency management response capability • The model supports the development of happy, high performing people	• Three waters services are delivered in a way that is more affordable than the alternative
Environmental Wellbeing 	• The health of marine, estuary and freshwater environments is reflected through our approach to network management and service provision	• Investment decisions balance growth demands against environmental outcomes	• Investment planning and service delivery recognises differences in the local environments of our communities	• Access to a broad range of skills and resources supports innovation and investment planning that produces good environmental outcomes	• Investments consider the long term environmental impacts to reduce whole of life costs

Comparison of the options

While earlier work considered a broad long list of options for collaboration, these are not considered further in this report.

For the purposes of this report, three options are assessed.

- An in house business unit with financial ringfencing for each council
- A wholly owned WSE for each council
- A Southern WSE, owned by the constituent councils of the Working Group.

These do not provide the full suite of options that may be available to councils at an individual level. It is acknowledged that councils may wish to consider their own options independently of the work undertaken for the Working Group.

Option 1 – In house Business Unit

This option involves councils providing three waters services through an internal business unit or division. This includes no formal collaboration between councils for the ongoing delivery of water services.

While this option most closely resembles the status quo delivery model for many councils, it is clear that future three waters delivery is not the same as the status quo, with key differences provided in the legislation.

The new statutory requirements for all water service providers will apply, including meeting statutory obligations and financial principles (ringfencing and financial sustainability requirements) and sustainability requirements, and separate new planning and reporting frameworks for water services. All models are subject to the economic regulation regime described above. The combined impact of these changes will be significant and mean that the future of three waters service delivery looks different to current arrangements

While this option may resemble the “status quo” there will be some key differences in the model due to the new regulations, this will include:

- New financial statements and financial reporting being required
- The need to prepare a water strategy
- Increased scrutiny and the need for clear separation of finances for three waters
- The influence of an economic regulator on revenue and price setting, and its ability to direct councils to make certain investment in its network
- New information disclosure requirements, and associated penalties for non-compliance, and their impact on staff workloads.

Councils may wish to consider establishing a three waters sub-committee with independent members to supplement elected members skills in their governance role. Structural change may be required in some cases to support ease of financial ringfencing.

Financial modelling of the in house delivery model option was undertaken as part of this programme of work for comparative purposes. That modelling and the outcomes it projects may differ from council LTPs or financial projections, as it applies a standard set of assumptions.

Benefits

- No significant changes to water service delivery approach, ownership or structure (if status quo)
- Local ownership is maintained through the usual council governance oversight and reporting to council through established internal processes
- Councils maintain oversight and some control over the programme of work and prioritisation of investment
- Minimum changes to meet legislative requirements.

Risks and disadvantages

- Significant additional administration requirements and costs to ring fence water and meet regulatory requirements
- Significant additional reporting and compliance obligations
- Likely increased scrutiny from the Government, Commerce Commission, and Taumata Arowai than may be afforded to WSEs
- Economic regulation activity may have broader impacts on Council to allow the Commerce Commission to be satisfied that councils have appropriately applied ringfencing provisions
- For most of the councils in the Working Group the increased borrowings to support three waters investment will impact their ability to invest elsewhere, with some having no borrowing head room to support activities other than three waters
- Councils will continue to compete for contracting resources and employees, and an inhouse delivery model is likely to provide a less attractive career path than alternative models
- Councils will have limited discretion in the setting of water charges, or investment needs, with an economic regulator setting many of these requirements
- There is a limited pool of expertise for staff with infrastructure regulation experience. These skills will be necessary in any future service delivery model, and roles in larger WSEs will be more attractive
- Will result in higher water charges than a Southern WSE which maintains local pricing
- May lead to some councils seeking to cut other services to keep overall cost increases for ratepayers and water consumers lower.

Option 2 – Wholly owned WSE

This option involves a council establishing their own wholly owned WSE responsible for that council's water services delivery.

This would involve major structural change, with the establishment of a new company with its own CEO, board of directors and management structure. The WSE may be able to procure some services from its parent council (at least in the short term).

Under this model:

- The WSE would be responsible for full water services including stormwater
- Councils would transfer assets, debt and powers to raise revenue
- Stranded overheads of the individual councils will not be compensated by the WSE, however the WSE may have the ability to procure services from shareholder councils in order to minimise the impact of stranded overheads
- Councils will be required to provide a guarantee or uncalled capital to the WSE to enable it to borrow through the Local Government Funding Agency
- Councils would not typically employ three waters staff directly and are unlikely to have a need to retain internal expertise
- Funding for this option would be determined by the WSE and the economic regulator and will be independent of council influence.

Benefits

- Each CCO would be 100% owned by their respective council. This provides a level of more direct accountability between the WSE and the council owners when compared to a Southern WSE
- Financial separation of water debt (and revenue), reducing pressure on council balance sheets
- Board appointments made by council appointment process, comprising independent professional directors
- Councils will not be directly impacted by economic regulation activities themselves
- Can access Local Government Financing up to the equivalent of 500% of operating revenues with the provision of parent support (through proportional guarantee or uncalled capital), although borrowing will be measured based on a Free Funds from Operations to debt ratio agreed with LGFA
- The WSE will set its own budgets and will control all the risks of delivering three waters services, this will enable the WSE to direct investment to where it is needed the most without competing for scarce resources (funding and staff)
- The WSE will be financially independent from councils, allowing it to more easily meet the future requirements to produce separate financial statements and water services strategies
- The WSE will be solely accountable to its customers/communities for the setting of water charges
- Certainty of long term funding creates opportunity to develop long term, consistent, pipelines of projects creating some efficiencies
- Core capability and higher wage jobs remain in the District when compared to a Southern WSE

- Independence and a singular focus on the delivery of three waters services means that the WSE can be better aligned to meeting the requirements of economic regulation and delivering the right infrastructure at the right time.

Risks and disadvantages

- Control will be more limited than a traditional CCO; the Commerce Commission and Taumata Arowai will exert significant control over the decision making of any water supplier through their regulatory powers including directing investment requirements and water fee/revenue requirements
- Competition for competent, skills based board members will be high, with a limited pool of qualified people. This may result in higher board fees, difficulty filling board positions, or the need to employ board members that are less qualified than members of jointly owned WSE boards
- A wholly owned CCO will lack financial and workforce resilience, as it will be smaller than existing councils, and have a smaller revenue base
- Competition for contractors and resources remains, as a large number of small WSEs and councils run operations independently of each other
- Recruitment and retention difficulties will likely continue, as larger jointly owned WSEs will be able to offer more career opportunities and development paths
- A wholly owned WSE will probably need to comply with stricter borrowing covenants than a larger, jointly owned WSE
- There is a limited pool of expertise for staff with infrastructure regulation experience. These skills will be necessary in any future service delivery model, and roles in larger WSEs will be more attractive
- Additional costs and complexities of establishing a CCO are created but a wholly owned WSE is not of sufficient scale to create meaningful benefits
- A wholly owned WSE will lack scale, meaning its procurement power will be weaker, impacting investment and service costs, and it will still be reliant on external consultants for some skills and expertise as it will not have a large enough programme to justify bringing these in house.

A Multi Council Water Service Entity

This option involves the four councils of the Otago and Southland regions establishing a water services entity (Southern WSE) that is responsible for all of the elements of water services delivery for its shareholding councils/shareholders. A targeted establishment date is proposed as 1 July 2027.

A number of assumptions representing key decisions in principle are built into this model. These are set out in more detail in the next section, Design Principles, but in summary :

- The WSE would be responsible for full water services including stormwater
- Councils would transfer assets, debt and powers to raise revenue
- There would be no requirement for a regional price to be adopted at establishment, or over any specific period of time
- Regionally consistent pricing will be applied at the earliest point and residential charges under this model for three waters services will not be any higher than otherwise would have been to deliver the same amount of total investment
- Stranded overheads of the individual councils will not be compensated by the WSE, however the WSE may have the ability to procure services from shareholder councils in order to minimise the impact of stranded overheads
- Rural water schemes will need to be worked through on a case by case basis, however it is assumed that the management and ownership of these schemes is transferred to a water entity unless existing scheme users agree to a community ownership model
- It is assumed that a Southern WSE will be empowered to set charges differentially, based on the level of service received (for example rural and urban water may attract different charges)
- Shareholding will be allocated evenly per council but without dividends being paid. Shareholdings have been determined on a “one share per council” basis to ensure that no council has more influence than any other, and to facilitate easier inclusion of additional shareholders at a later date
- Debt guarantees or uncalled capital requirements from LGFA will be determined using a pre-agreed methodology that will likely consider the opening debt position of each council and its future investment needs
- There is no assumption that debt would be “pooled” across all ratepayers. Ringfencing of debt is one mechanism that may be able to be used to achieve local pricing
- Councils would not typically employ three waters staff directly and are unlikely to have a need to retain internal expertise
- Funding for this option would be determined by the water services entity and the economic regulator and will be independent of council influence.

Benefits

- Standardisation of asset management systems, practices and data will improve planning across the regions
- A shared workforce increases resilience to staff vacancies, and provides improved career opportunities across the regions

- Combined scale of WSE may mean expertise, specialisation or systems are able to be utilised that a single council would not otherwise be able to provide. This may include the ability for a WSE to employ resources that it would otherwise need to procure from consultants
- Standardisation of contract management approach and procurement process, as well as the development of larger programmes of work, will improve the WSE's attractiveness in the contractor market and lead to greater efficiency
- Financial separation of water debt (and revenue), reducing pressure on council balance sheets
- Certainty of long term funding creates opportunity to develop long term, consistent, pipelines of projects creating some efficiencies
- Can access Local Government Financing up to the equivalent of 500% of operating revenues with the provision of parent support (through proportional guarantee or uncalled capital)
- The WSE will set its own budgets and will control all the risks of delivering three waters services, this will enable the WSE to direct investment to where it is needed the most without competing for scarce resources (funding and staff)
- The WSE will be financially independent from councils, allowing it to more easily meet the future requirements to produce separate financial statements and water services strategies
- Independence and a singular focus on the delivery of three waters services means that the WSE can be better aligned to meeting the requirements of economic regulation and delivering the right infrastructure at the right time
- Councils will not be directly impacted by economic regulation activities themselves
- The water entity will be solely accountable to its customers/communities for the setting of charges
- The WSE will have the scale to attract high quality independent directors and economic regulation specialists together with the skilled staff required
- Can provide lower residential three waters charges to all water consumers than the in house delivery model if localised pricing is adopted.

Risks and disadvantages

The risks and disadvantages of this option include:

- Without appropriate processes in place, some communities may receive higher proportionate levels of investment than others and the prioritisation of investment may differ or change in timing compared to under the Council inhouse option
- The WSE will be able to set three waters prices entirely independently from decisions made by councils, and these decisions may have affordability implications for communities. Economic regulation will mitigate this risk, and guiding principles regarding the setting of water charges may be incorporated within shareholders agreements, the constitution and statements of expectation
- There may be a loss of some high value jobs in small districts, but given the geography covered, the WSE will likely need a presence of skilled staff in each district.
- The water services organisation may seek to choose investment options that present the minimum cost to achieve compliance rather than reflecting local community expectations for a higher level of service

- There may be a reduction in the level of control that is able to be exerted by shareholder councils, however the regulatory activities of the Commerce Commission and Taumata Arowai will result in reduced control in all delivery models
- A larger WSE is less able to procure services from individual councils, meaning the impact of stranded overheads may be more acute.

Design principles of a Southern WSE

There are a number of key decisions regarding a Southern WSE which may impact its ability to extract financial and non-financial benefits. These design elements may be important for decision makers to understand when considering different options.

A workshop with the Chief Executive Officers and Council Executive Group members was held on 13 February 2025 to discuss some of the key principles for WSE design.

What has been decided

The workshop on 13 February 2025 considered a number of key WSE design principles. In most cases, these are to be considered "guiding principles" which are subject to further detailed design work before formal decisions are made. In particular, the following principles were agreed:

- Price harmonisation and its implications were debated. There was a general agreement that this would be desirable over time, however the working principle adopted was that "residential charges for three waters services will not be any higher than they otherwise would have been under a council delivery model for the same level of local investment". Over time, this principle may allow the WSE to reduce the total number of geographically distinct charges that it sets
- The WSE would be a jointly owned council controlled organisation, with no involvement from consumer trusts
- That the WSE would have responsibility for delivering stormwater services. The precise arrangements behind that, including whether ownership is to transfer or whether this would be through a contractual model was yet to be determined
- Stranded overheads and how to address them were discussed, including potential service sharing and cost allocation. There was general preference to avoid any model where the WSE compensates councils for stranded overheads (without precluding the ability for the WSE to procure services from councils)
- That shareholding should be on an "equal rights" basis. That is, each council shall have equal shareholding and equal decision making rights within the proposed WSE. Other shareholding options were considered, however an equal shareholding approach was considered to be the most appropriate model to enable entry and exit of councils from the model in future years
- Decisions regarding appointment of board members or adoption of a statement of expectations should be on the basis of a majority, and will not be required to be unanimous. While a requirement for unanimous decisions was considered, it was determined that this would likely be challenging to achieve
- A target establishment date of 1 July 2027 was determined to be appropriate. There were concerns that moving at greater pace than this would be challenging, particularly given local government elections in late 2025
- It was agreed that the group would engage with Ngāi Tahu to try and define a meaningful role for iwi within the WSE. No decisions were made on what that role would look like, however it was agreed that this should be meaningful but not reach as far as the previous reform
- It was agreed that the WSE should have no intention of paying a dividend

- It was agreed that there would be a need for a shareholder representative group to be established to manage appointments of the board of directors, the development of a statement of expectation, and to fulfil the councils' governance and oversight roles. The number of representatives from each council to that committee, and the voting mechanisms are yet to be determined.

What has yet to be decided

There are a number of WSE design elements that are yet to be agreed, and the detail regarding these will need to be worked through post-consultation. These include, but are not limited to:

- The precise role of mana whenua/iwi in the governance arrangements
- Whether the WSE has a "head office" and where that "head office" may be located
- The extent of any shared services that may be procured from councils, and on what terms
- The actual management and governance structure
- The arrangements for allocating financial guarantees or uncalled capital requirements to councils (for example is this based on shareholding, opening debt, future investment?)
- A detailed funding and pricing plan for the WSE including local and regional price differences
- A combined capital works programme, and the development of any principles or processes to ensure that investment is allocated/prioritised fairly
- The number of representatives from each council on the shareholders representative group
- The mechanisms to incorporate consumer or ratepayer feedback
- Any restrictions or processes that need to be adopted during the transition period between adoption of a (joint) WSDP and the establishment of a WSE (for example renewal of contracts or commitment to new capital works)
- The arrangements for the transfer of stormwater services.

Many of these decisions will be worked through and incorporated in either:

- The implementation plan for the WSE
- A shareholders agreement, constitution or first statement of expectations for the WSE
- Left to be decided by the WSE itself.

Rural schemes

The councils in the working group include rural and provincial councils. These councils provide a range of different levels of service for drinking water to their communities. A few councils include rural water schemes which provide drinking water for human consumption as well as water used only for livestock and/or irrigation.

The provision of water to rural communities is fundamentally different to the provision of water in an urban setting. In particular:

- The level of treatment provided may differ (particularly if the scheme is not intended to be used for drinking water)
- By volume, the majority of water is used for purposes other than human consumption

- The schemes are often low pressure, trickle feed systems, rather than on demand schemes
- They are proportionally very large, with fewer connections per kilometre of pipe
- They have large volumes of water consumed by a small number of customers
- They may have a different charging mechanism (often sold in units of entitlement rather than volumetric or fixed price charges)
- They may have more hands on management or governance, for example through a rural water scheme committee.

This report, and the underlying financial modelling, does not specifically deal with rural water schemes. For the purposes of this report, rural water schemes are part of the water supply activity, and rural water users are treated as being residential connections for the first unit that they purchase only. Further refinement of this assumption over time may mean that average residential waters charges, and charges for rural water schemes, will be revised.

As work progresses on further developing arrangements for the Southern WSE, decisions will need to be made on the following matters, in consultation with rural water users:

- Whether a different price is set for rural and urban water. It is currently proposed that the WSE will be able to set different charges based on level of service received and geographic location
- What the governance or management role for rural water may look like, including whether there are mechanisms to preserve some of the functions of rural water scheme committees.

Commercial users

The report, and the underlying financial modelling focusses mainly on residential three waters customers. To do so, we:

- Determine the total revenue requirement for the WSE
- Multiply that by the expected percentage of revenue to come from residential customers (based on each council's current proportions)
- Divide the result by the number of residential customers.

This approach is adopted because it is recognised that a small number of commercial connections can contribute a large percentage of total revenue for some councils. This is particularly true for rural and provincial councils.

We do not report the impact on water charges for commercial customers. However, given our high-level approach does not assume any change in the underlying tariff structure for each council, the annual percentage increase in rates for residential customers can assumed to be equally relevant for commercial customers in our modelling. That is, the shape of the curve in our graphs would be consistent between residential and commercial customers.

Multi-criteria analysis

Approach

A desktop assessment of the three options for three waters service delivery against the agreed strategic objectives was carried out by Morrison Low. The assessment relied on qualitative assessment (for non-financial criteria) and quantitative assessment for the financial sustainability criteria.

In completing the assessment, investment objectives were applied an equal weighting (so all criteria totalled 100%).

Options were assigned a score between -3 and +3. A score of -3 represented that the option had significant negative effects against the relevant assessment criteria, while a score of +3 represented significant positive effects. A score of zero indicated that the option resulted in neither an improvement nor deterioration of outcomes. Options were assessed against the "In house business unit" for comparative purposes. While not the status quo, this option is considered to be the default option should no change otherwise be made.

Results

The results of the Multi Criteria analysis (MCA) are shown in Table 2 below. The full results of the Multi Criteria Analysis, including relevant commentary are included in **Appendix One** - Non financial MCA. The scores assigned to objective 5 (the financial sustainability criteria) may vary between councils. However, the non-financial criteria are considered to be consistent across all councils.

Table 2 Summary of MCA analysis

	Objective					Total score
	Delivery of safe and healthy water	Responsive to changing environment and demand	Responsive to local needs	Efficient and effective delivery of three waters	Financially sustainable and enduring	
In house business unit	0	0	0	0	0	0
Wholly owned WSE[2]	1	-1	0	-1	-1	-0.4
Southern WSE	2	1	-2	3	1	1.0

The difference between scores are significant, indicating that there would need to be a large shift in scores to change the overall outcome of the MCA.

[2] The scoring for a wholly owned WSE can change depending on the council. The score in the table reflects the assessment that applies to most of the councils. Any differences are highlighted in the text below the table.

The assessment highlights significant benefits for a Southern WSE model, reflecting:

- The benefits of scale in improving financial and workforce resilience, and providing greater access to specialists, high quality board members, and good staff
- The consequences of regionalisation on local decision making and outcomes, and a potential loss of some local high value jobs. Many of these risks may be mitigated through WSE design and implementation
- Scale providing increased opportunities to obtain efficiencies through certainty of funding and consistent systems and processes
- The benefits of financial autonomy and scale providing financial resilience
- The results of indicative financial modelling which identified that there are opportunities for the WSE to levy lower household charges across all districts than would be the case with the in house option or wholly owned WSE.

Impacts on levels of service

Multi criteria analysis also considered the impacts of the three options on the levels of service provided to water consumers in the districts represented by councils in the Working group. Under all models, we expect that water consumers will receive the same quality, quantity and pressure of water over the next 5 – 10 years. A comparison of the differences in levels of service over that time period is summarised in the table below:

Table 3 Level of service impacts

	Council Operated Enhanced service	Wholly owned WSE	Southern WSE
Quality and safety of water	• No change	• No change	• No change
Quantity and pressure of water	• No change	• No change	• No change
Responsiveness to faults/complaints	• No change	• May have minor improvements	• May have minor improvements due to improved contract management • May have reduced local presence, however given the geographical area this is likely to be a minor impact
Investment in network	• No change	• May have minor increase from improved delivery focus	• Will likely increase as a result of improved delivery • May differ across districts as work programmes are prioritised to manage scarce resources (contractors, staff and funding)
Summary	**No Change**	**May have minor improvement**	**Likely to result in minor improvement**

Over a longer period of time, we would expect that a larger water entity will have an improved ability to attract and retain staff, and to be able to afford to hire staff with a broader range of skills and specialisations. This, alongside increased ability to leverage debt, improved asset management practices, and dedicated focus should lead to better investment in the network, leading to fewer faults, improved responsiveness, and overall higher levels of service.

There are also opportunities for greater efficiency with scale. A Southern WSE would have access to a broader range of skills and specialisations than the in house option or wholly owned WSE, This could support resilience and generate efficiencies through reduced reliance on consultants.

Financial modelling

Introduction

This section summarises the initial outputs of our financial modelling for a Southern WSE.

The modelling compares a "comparator case" with a Southern WSE. This comparator case is not the same as the existing service delivery model for councils and therefore may not align with each council's own projections regarding three waters price paths. The comparator case is necessary to ensure that financial results are compared using the same base assumptions, and that only differences that are the result of a change in delivery model are reflected.

The initial results focus on key metrics:

- Household charges for three waters
- Capital investment
- Debt

Detailed financial modelling assumptions are outlined in **Appendix Three -** Modelling assumptions

Assessment of risk

The financial modelling applied for this report is particularly sensitive to the size of each council's capital works programme. This is because the scale of the investment programmes require significant amounts of borrowing, and one of the key differences between in house delivery and the WSE options being considered, is the ability to access debt.

We are also aware that there is large amount of uncertainty surrounding capital programmes for all councils, due to:

- Inherent uncertainty related to long term cost projections, which typically may not have detailed design or may not have been tendered
- The recent release of draft wastewater standards, which are yet to be properly costed
- The transfer of responsibility of setting stormwater standards to Taumata Arowai
- Direction provided to Taumata Arowai to take a pragmatic approach to the application of drinking water standards and regulations which may alter planned investment requirements

To address some of this risk, a high level assessment of the cost assumptions applied by each council was completed by Utility NZ. This assessment identified where there was likely to be material risk of cost estimations being wrong or uncertain. The outputs of this assessment, contained in the report at **Appendix Four** - Southern CCO Programme Assurance Findings, have been used to complete sensitivity testing of the WSE and council business unit models. This is represented by the shaded area in relevant charts.

Details of the sensitivity testing used are also presented in **Appendix Four** - Southern CCO Programme Assurance Findings.

Regional results

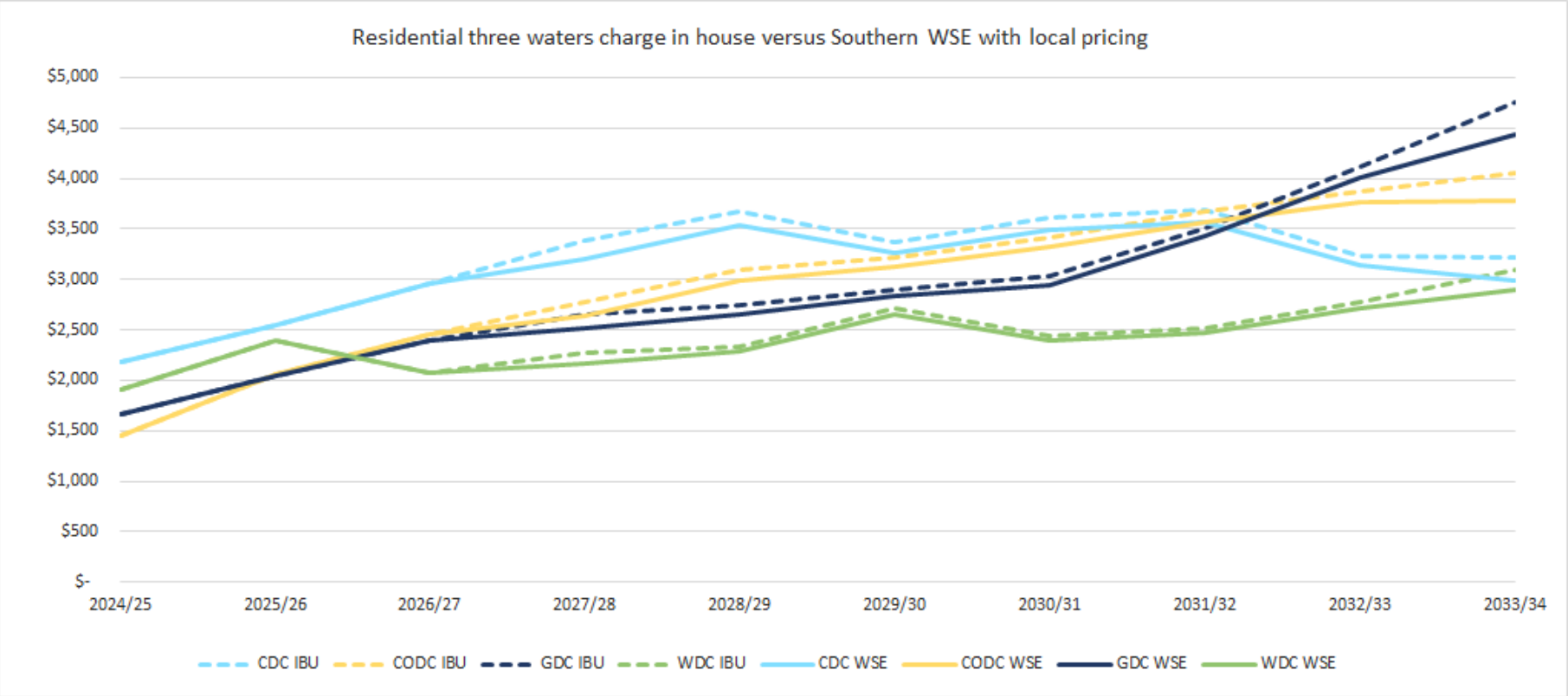
Average household charges – local pricing

Figure 5 below presents (nominal) average household charges for the in house business unit for each council against a local price from the Southern WSE through to 2034.

The dotted lines represent the base comparator case (in house business unit) costs for each council, with the solid lines representing the local prices that may be charged by a Southern WSE.

It's important to note that local prices have been set by sharing the WSE's savings proportionately across each council. Alternative pricing models may be adopted, including full ringfencing of debt, interest, operating costs, or total expenditure. However, the modelling demonstrates that the WSE is able to deliver household water charges which are lower for all ratepayers than they otherwise would be through an in house business unit.

Figure 5 Local prices under a Southern WSE



The chart shows all water consumers of a Southern WSE are able to have lower three waters charges than they would otherwise receive through an in house delivery model.

Average household charges – regional pricing

There is no requirement for a Southern WSE to adopt a harmonised or regional price. In fact, the working group has indicated a preference for the WSE to adopt a pricing principle that:

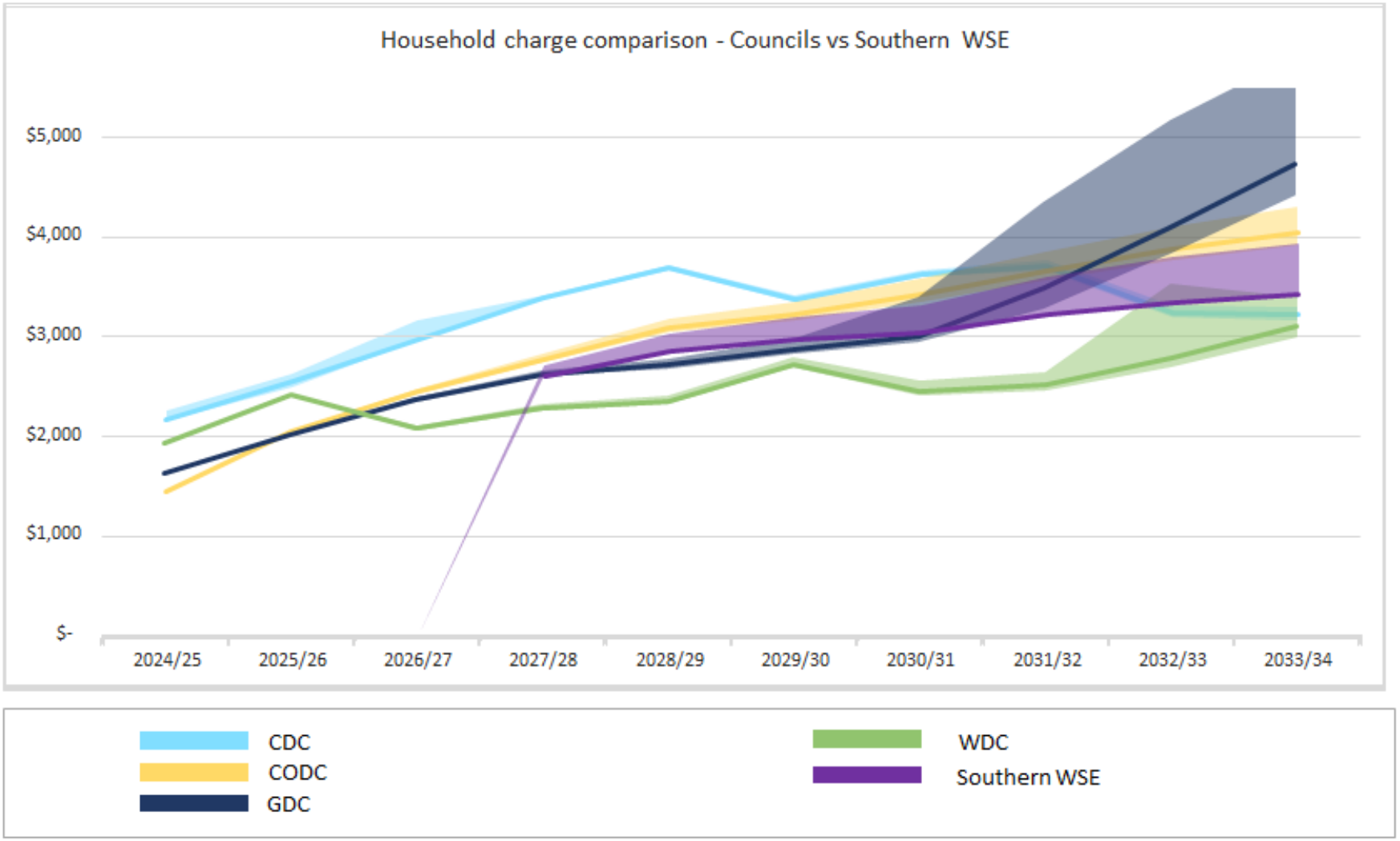
"Charges for water services shall be no higher through the Southern WSE than they otherwise would have been through an in house delivery model that has completed the same level of local investment as the Southern WSE"

Notwithstanding that underlying principle, we consider that it is likely that a Southern WSE will, over time, seek to move towards a pricing model where there is a consistent price for the same level of service received.

Modelling presented in Figure 6 shows the potential price range under a regional pricing model. The shaded area represents uncertainty arising from the capital programme, with the solid line representing our most current and up to date understanding of a potential capital works programme.

The modelling shows that as forecasting uncertainty increases, there is an increasing likelihood that a regional price that is lower for all water consumers may be able to be reached.

Figure 6 Regionalised prices under a Southern WSE



Debt

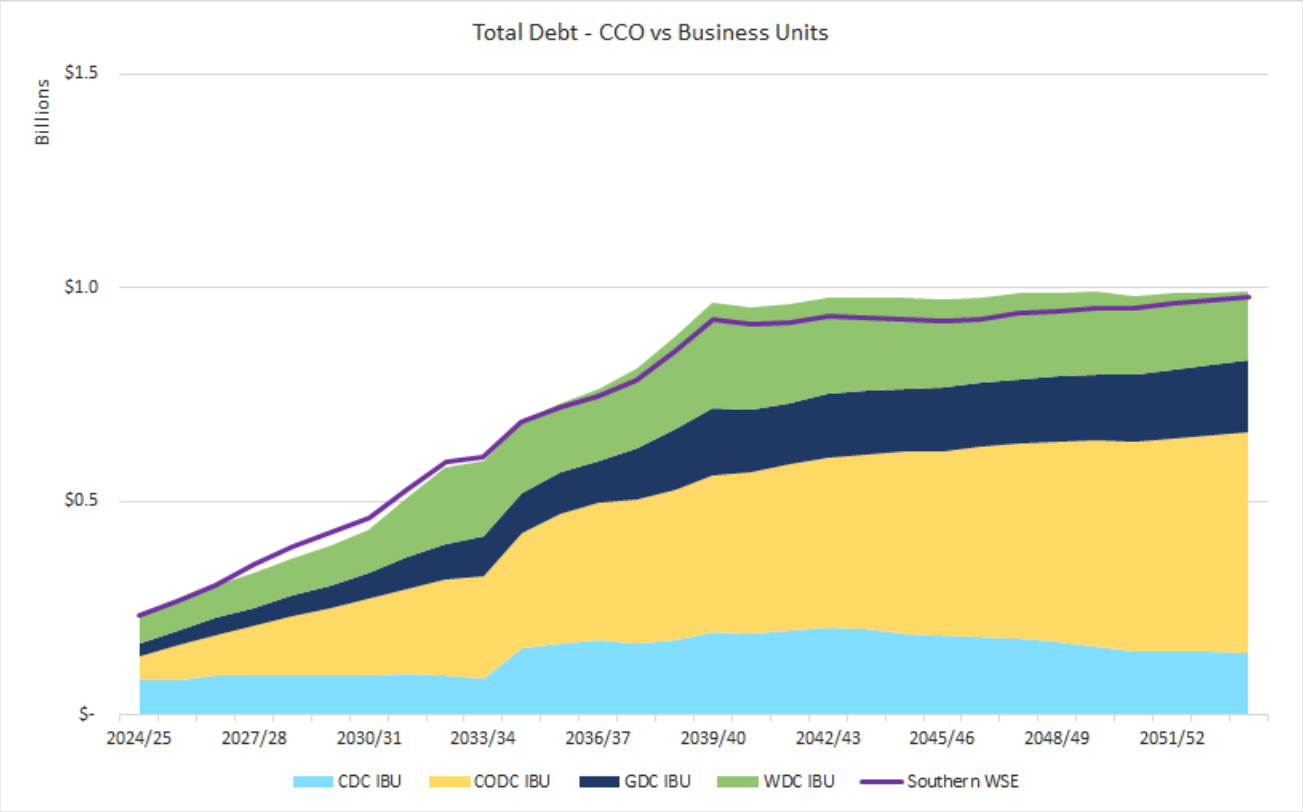
The chart below shows total Southern WSE debt compared to the combined three waters debt of the participating councils.

Although not significant as a percentage of total debt, the Southern WSE can be more highly leveraged than the combined councils, particularly during its initial five years (FY2028–FY2032). This higher leverage means the WSE requires less revenue to support its borrowing, enabling it to lower its overall revenue requirements. As a result, the WSE can offer reduced Three Waters charges to consumers compared to what individual councils would require.

The Southern WSE looks to optimise debt and revenue to keep charges low throughout the modelling period. This means debt and revenue stabilise over the longer term.

Given inherent modelling uncertainty beyond the first 10 years, we would expect borrowing over a long term to be sustained at higher levels than represented in each council's respective profile.

Figure 7 Debt profile of combined four councils versus a Southern WSE



Revenue

The chart below shows total revenue for a Southern WSE compared to the combined three waters revenue of the participating councils.

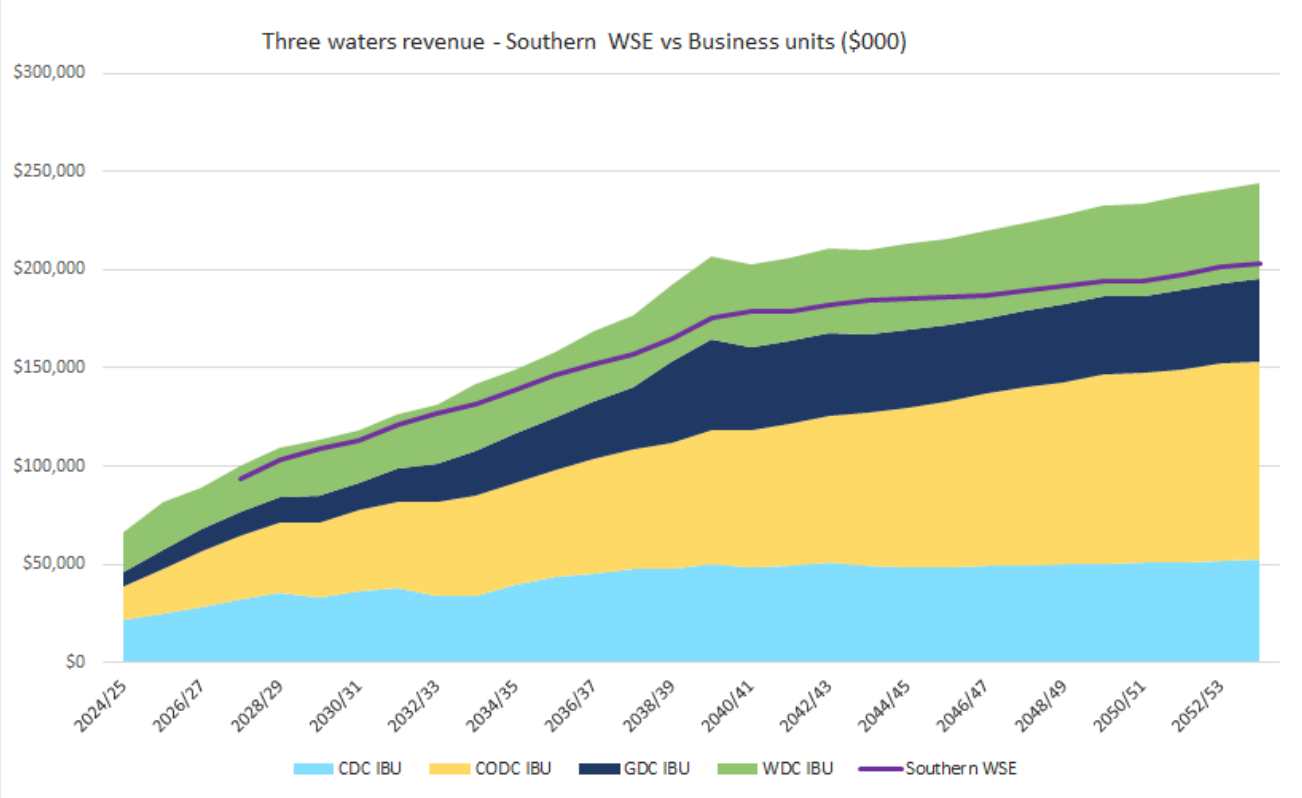
A Southern WSE is able to be more highly leveraged than the combined councils. This means that the WSE does not need to generate as much revenue to support its borrowing requirements and is able to reduce its overall revenue requirements to support that debt. Ultimately that allows reduced three waters charges to consumers compared to individual councils.

The Southern WSE looks to optimise debt and revenue to keep charges low throughout the modelling period. This means debt and revenue stabilises over the longer term.

As the WSE begins to realise efficiencies, it is able to reduce its total revenue requirements even further when compared to the combined councils.

Critically, because the WSE requires less revenue than the combined councils throughout the modelling period, it is able to spread the benefits of this across all water consumers to ensure that they pay less than they otherwise would have.

Figure 8 Revenue profile of combined four councils vs Southern WSE



Capital expenditure

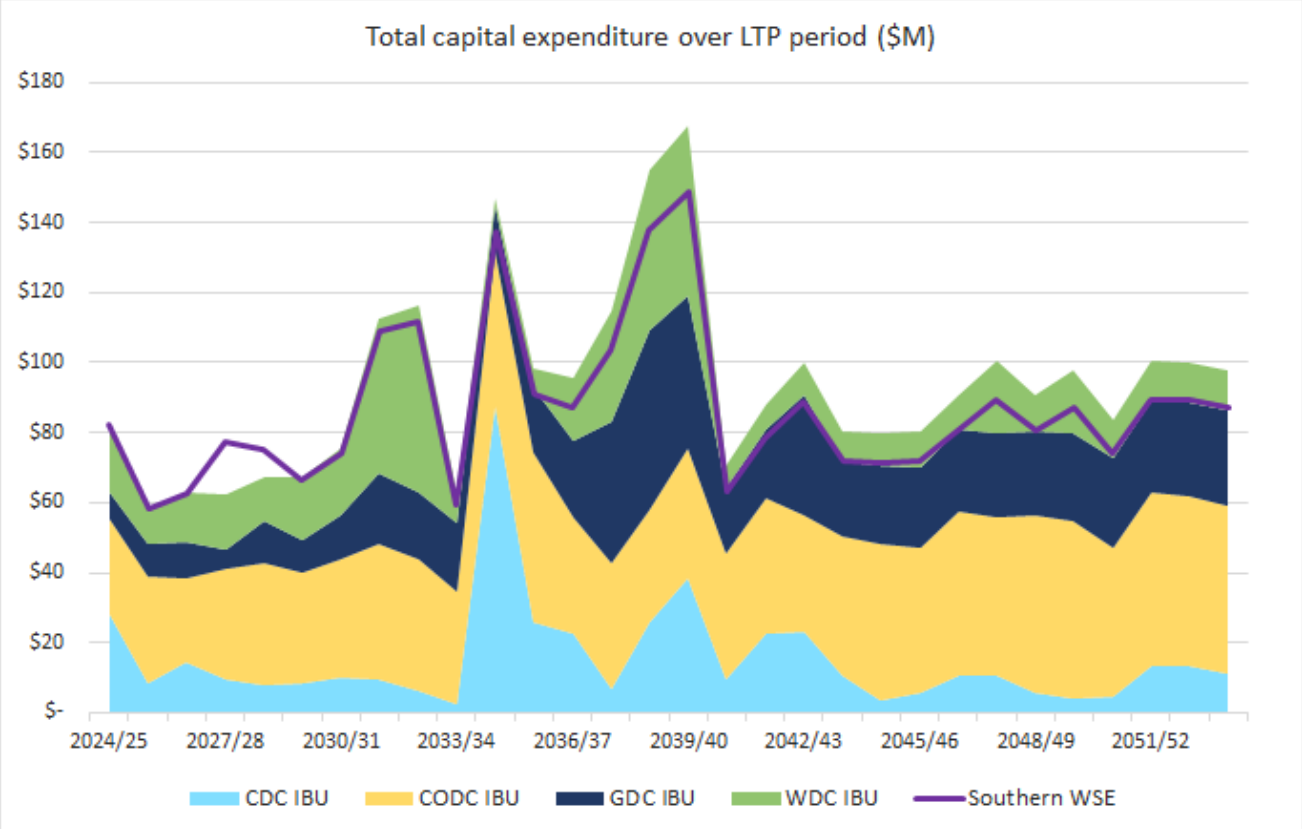
The chart below shows total capital expenditure for an Otago Southern WSE compared to the combined three waters debt of the participating councils.

The Southern WSE has higher capital expenditure levels than the combined councils in its first year, reflecting the need to incur establishment costs[3]. Over time, a Southern WSE is able to reduce capital expenditure compared to the combined councils as it begins to achieve organisational efficiencies through improved asset management practice and coordinated procurement to deliver the same programme of works. These savings ultimately give rise to lower three waters charges.

The capital works programme is generally flat, with the exception of:

- A spike in 2032 and 2033 relating to Waitaki District Council's wastewater rising main renewal and pipe relocations
- A spike in 2035 relating to Clutha District Council's Milton Wastewater Treatment plant
- A spike in 2039 and 2040 relating to the combined impact of the Gore Wastewater Treatment plant

Figure 9 Combined capex profile of four councils vs Southern WSE



[3] Refer to Appendix One for the modelling assumptions used

30 year projections

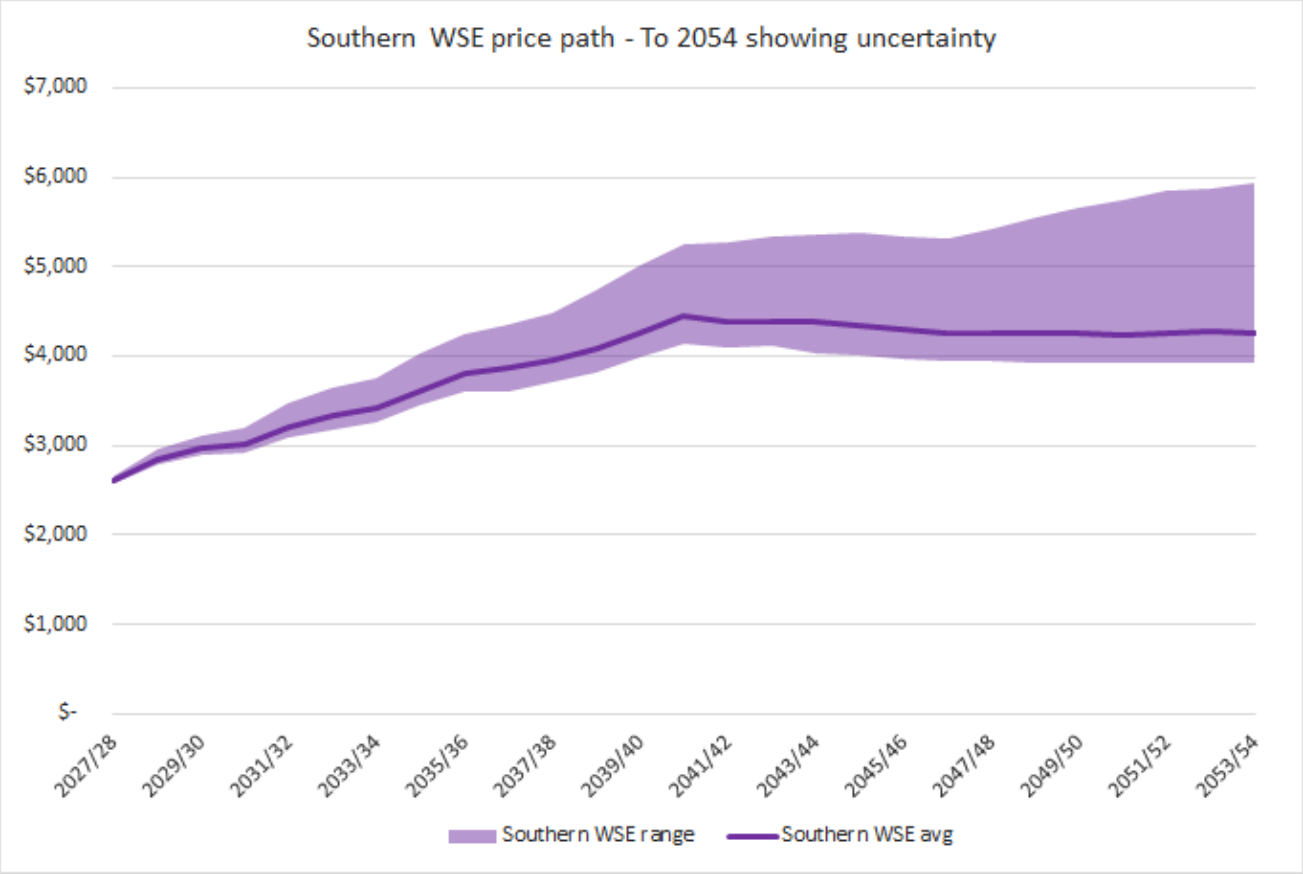
We have included indicative 30 year projections in this iteration of modelling. Because of the inherent uncertainty of 30 year capital programme projections we have:

- Applied a very broad range of sensitivity to the capital programme beyond 2034
- Not presented potential price paths for individual councils beyond 2034.

The modelling from 2035 – 2054 is therefore intended to be indicative only. It is intended to demonstrate that:

- Prices are expected to stabilise over the long term due to the approach to financing
- The high levels of debt required by the WSE do not require significant price rises to service

Figure 10 30 Year regionalised price path for Southern WSE (three waters household charges inc GST)

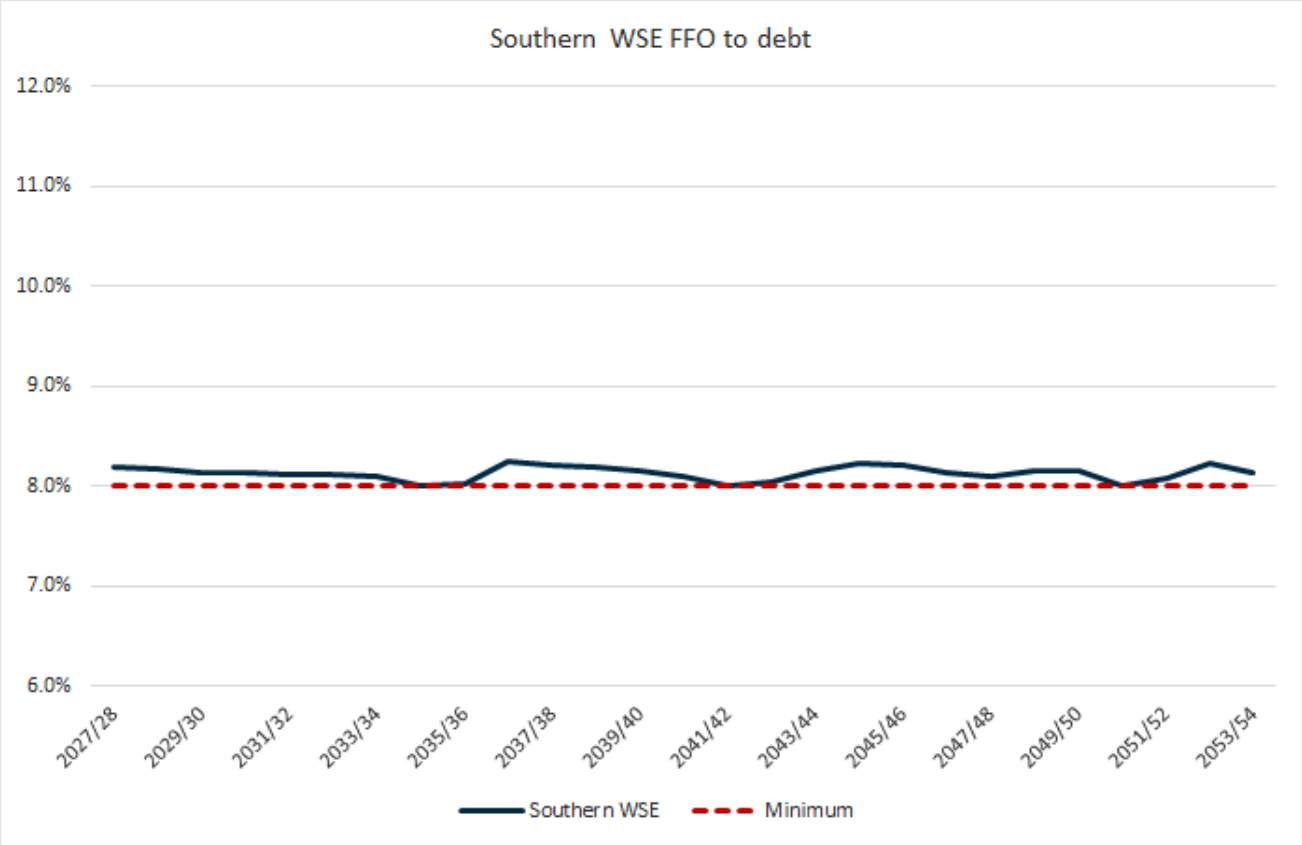


30 year borrowing profile

Our modelling assumes that the Southern WSE will maintain an FFO to debt ratio of 8% over the long term. We note that precise lending arrangements for WSEs are yet to be agreed, and will be agreed on a bespoke basis with LGFA. Based on our discussions with LGFA, we understand that it is likely that a WSE of the proposed scale will be able to obtain a lending covenant of 8% FFO to debt.

To the extent that the WSE is required to comply with a higher FFO ratio, modelling would indicate that this could result in higher three waters charges in the short term, with limited impact over the longer term horizon. In all cases, because a Southern WSE will be able to obtain a more favourable FFO than a wholly owned WSE, three waters charges will remain lower than alternative arrangements.

Figure 11 Southern WSE compliance with lending covenant



Individual council results

For ease of comparison, the results for each individual council are presented below. This includes the impacts of sensitivity testing in the comparator case and Southern WSE.

Central Otago District Council

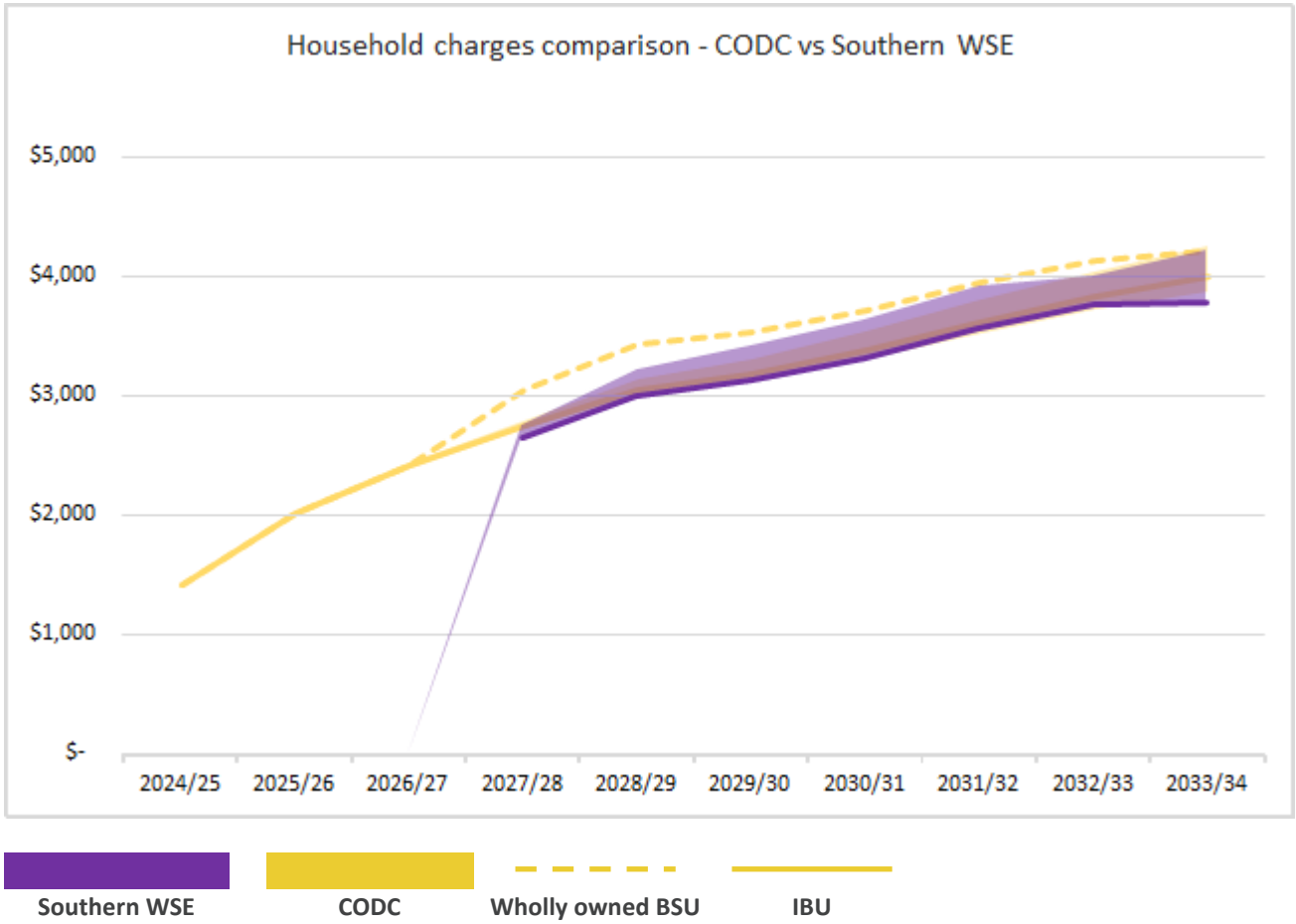
Household charges

The chart below shows the result of our model for Central Otago of:

- An in house business unit
- A wholly owned WSE (represented by the dotted line), and
- A local price charged by a Southern WSE.

We have shown price paths for the in house business unit and the Southern WSE as a range (shaded area) and a single line representing our current best estimate of the likely capital works programme for CODC.

Figure 12 Household charges for CODC vs wholly owned and Southern WSEs



The chart highlights that:

- A Southern WSE provides a slightly lower price path for water consumers in the Central Otago District, but it is generally within the range of the internal business unit.

- A wholly owned WSE is likely to be more expensive for CODC water consumers than an in house delivery model.

The impact of each model on household charges, based on the base case capital works programme, is also highlighted in the table below:

Table 4 Comparison of household three waters charge (incl GST) for CODC

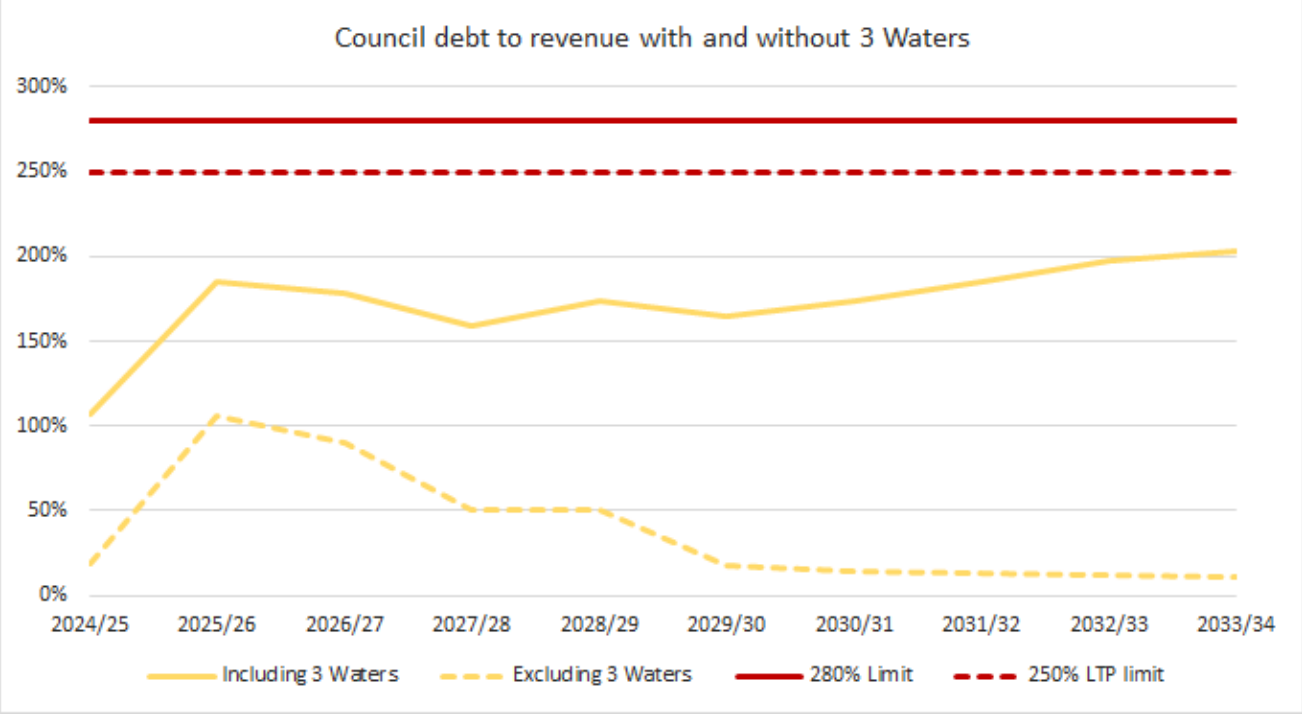
Entity	2024/25	2027/28	2033/34
In house business unit	$1,445	$2,780	$4,047
Wholly owned WSE		$3,094	$4,266
Southern WSE		$2,645	$3,775

Total Council debt to revenue

The chart below shows a comparison of total council debt to revenue with and without three waters debt being included[4]. Both the wholly owned WSE and the Southern WSE would result in three waters debt and revenue no longer impacting Council's borrowing limits.

It shows that, without three waters debt and revenue, CODC would improve its debt to revenue ratio from 203% to 11% by 2034. This represents an increase in potential borrowing headroom of $120 million. Without a transfer of three waters, Council's borrowing capacity will become increasingly strained.

Figure 13 CODC debt to revenue with and without three waters



[4] For the purposes of assessing borrowing capacity, Councils revenue and cash reserves from endowment funds has been excluded.

Clutha District Council

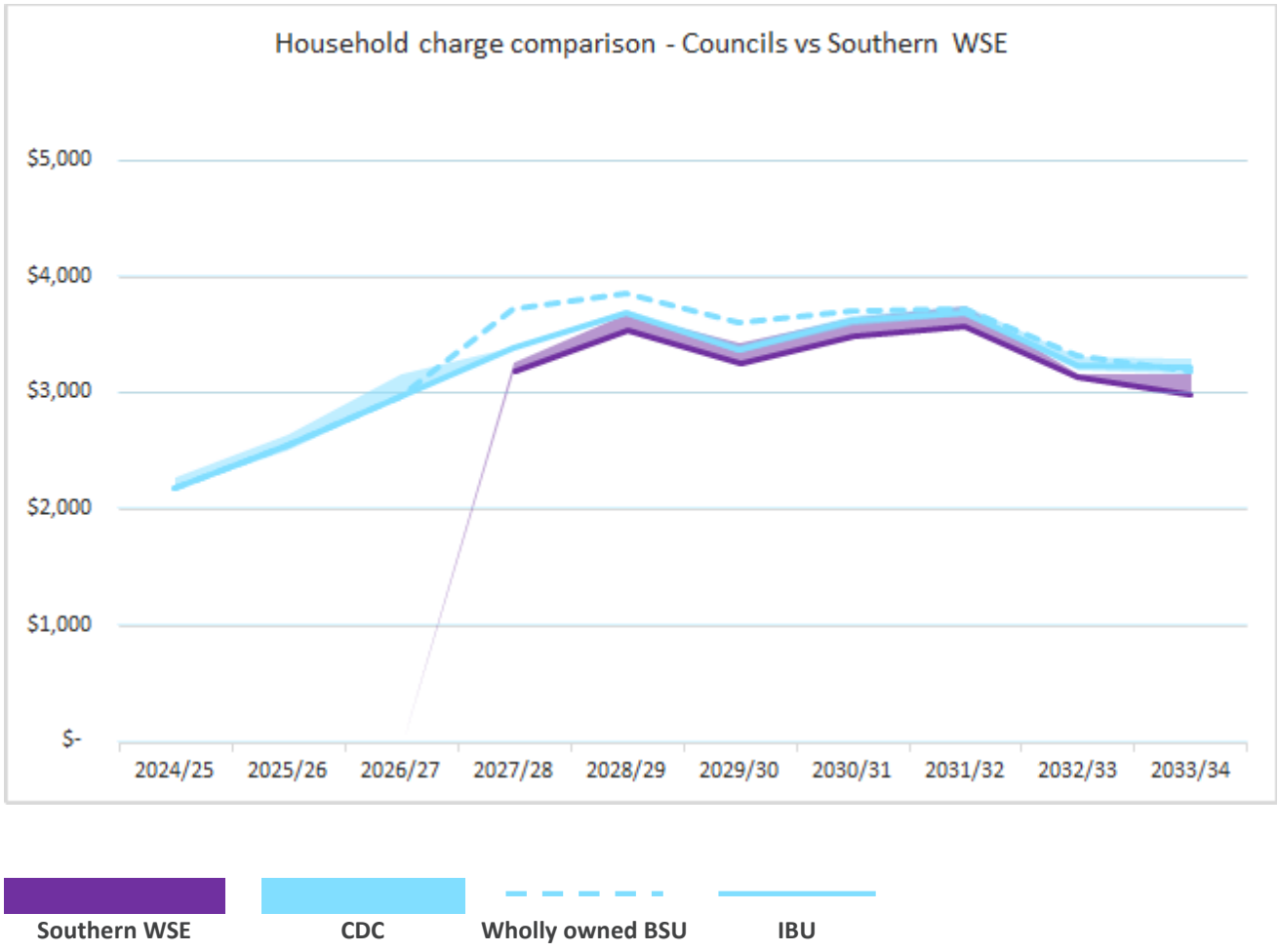
Household charges

The chart below shows the result of our model for Clutha of:

- An in house business unit
- A wholly owned WSE (represented by the dotted line), and
- A local price charged by a Southern WSE.

We have shown price paths for the in house business unit and the Southern WSE as a range (shaded area) and a single line representing our current best estimate of the likely capital works programme for CDC.

Figure 14 Household charges for CDC vs wholly owned and Southern WSEs



The chart highlights that:

- A Southern WSE provides the lowest price path for water consumers in the Clutha District.
- A wholly owned WSE is likely to be more expensive for CDC ratepayers than an in house business unit.

The impact of each model on household charges, based on the base case capital works programme, is also highlighted in the table below:

Table 5 Comparison of household three waters charge (incl GST) for CDC

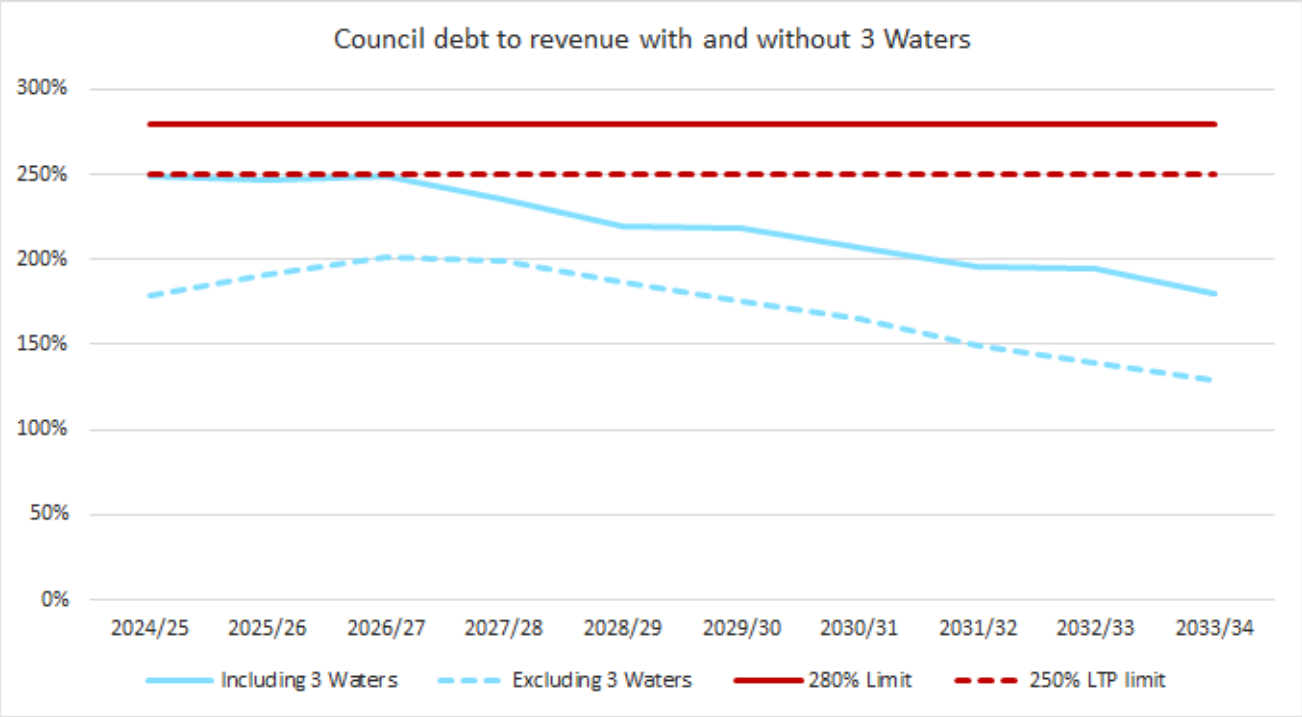
Entity	2024/25	2027/28	2033/34
In house business unit	$2,181	$3,386	$3,211
Wholly owned WSE		$3,727	$3,178
Southern WSE		$3,195	$2,985

Total Council debt to revenue

The chart below shows a comparison of total council debt to revenue with and without three waters debt being included. Both the wholly owned WSE and the Southern WSE would result in three waters debt and revenue no longer impacting Council's borrowing limits.

It shows that, without three waters debt and revenue, CDC would improve its debt to revenue ratio from 180% to 129% by 2034.

Figure 15 CDC debt to revenue with and without three waters



Gore District Council

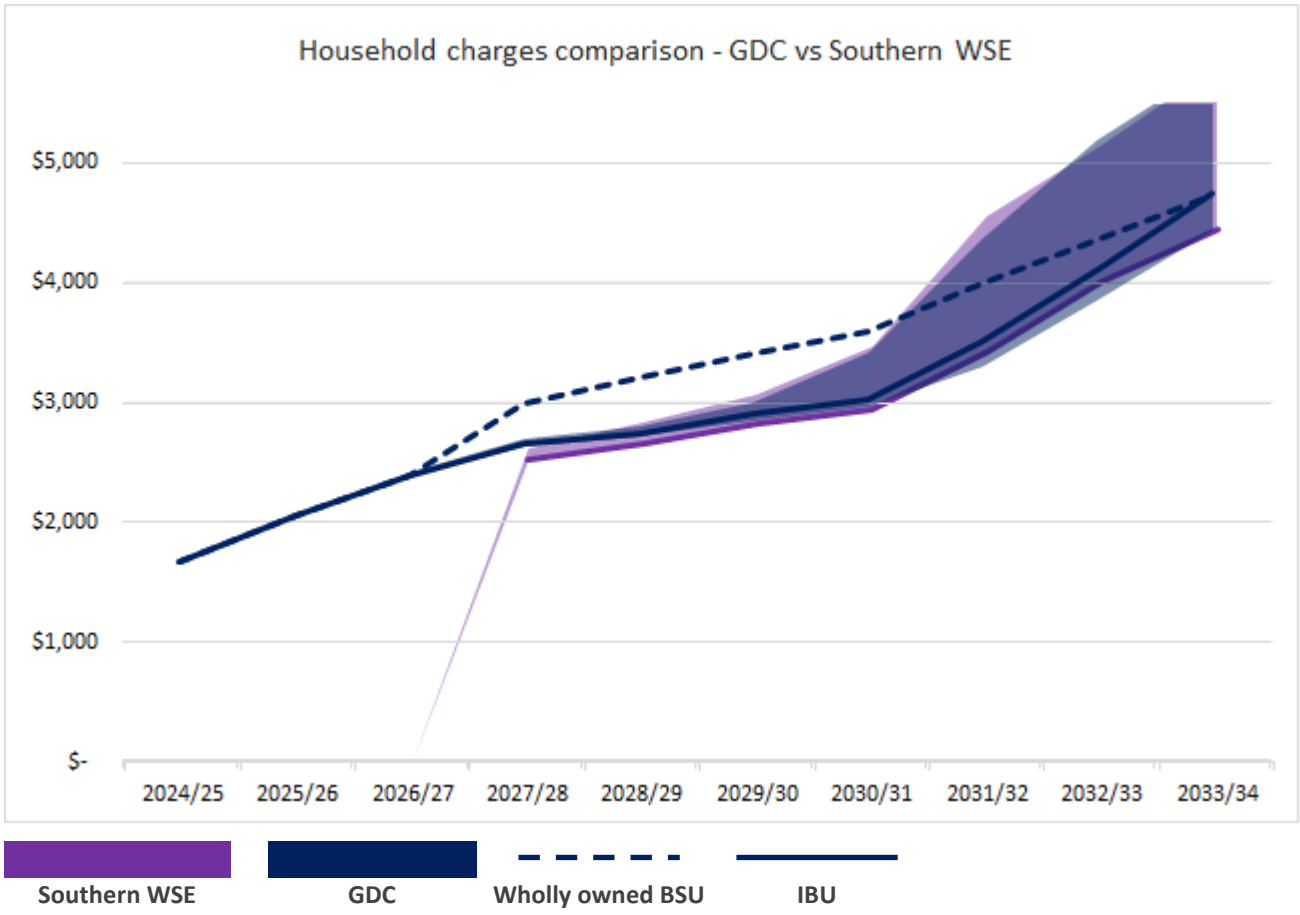
Household charges

The chart below shows the result of our model for Gore of:

- An in house business unit
- A wholly owned WSE (represented by the dotted line), and
- A local price charged by a Southern WSE

We have shown price paths for the in house business unit and the Southern WSE as a range (shaded area) and a single line representing our current best estimate of the likely capital works programme for GDC.

Figure 16 Household charges for GDC vs wholly owned and Southern WSEs



The chart highlights:

- A local price from the Southern WSE is likely to be lower than price under either of the alternative models for GDC, however the range of outcomes is similar to the internal business unit.
- A wholly owned WSE is likely to provide a more expensive household charge for water consumers in Gore.

The impact of each model on household charges, based on the base case capital works programme, is also highlighted in the table below:

Table 6 Comparison of household three waters charge (incl GST) for GDC

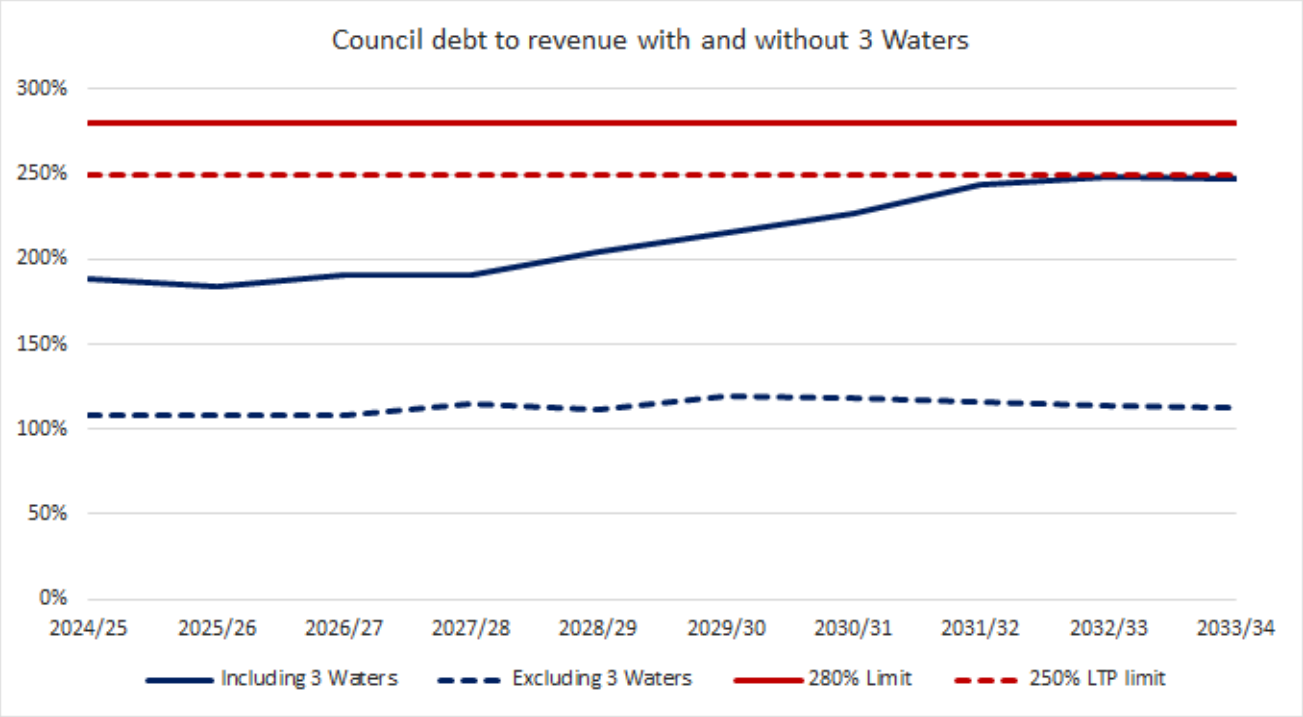
Entity	2024/25	2027/28	2033/34
In house business unit	$1,667	$2,653	$4,755
Wholly owned WSE		$2,986	$4,735
Southern WSE		$2,521	$4,435

Total Council debt to revenue

The chart below shows a comparison of total council debt to revenue with and without three waters debt being included. Both the wholly owned WSE and the Southern WSE would result in three waters debt and revenue no longer impacting Council's borrowing limits.

It shows that, without three waters debt and revenue, GDC would improve its debt to revenue ratio from 250% to 113% by 2034. This represents an increase in potential borrowing headroom of $35 million.

Figure 17 GDC debt to revenue with and without three waters



Waitaki District Council

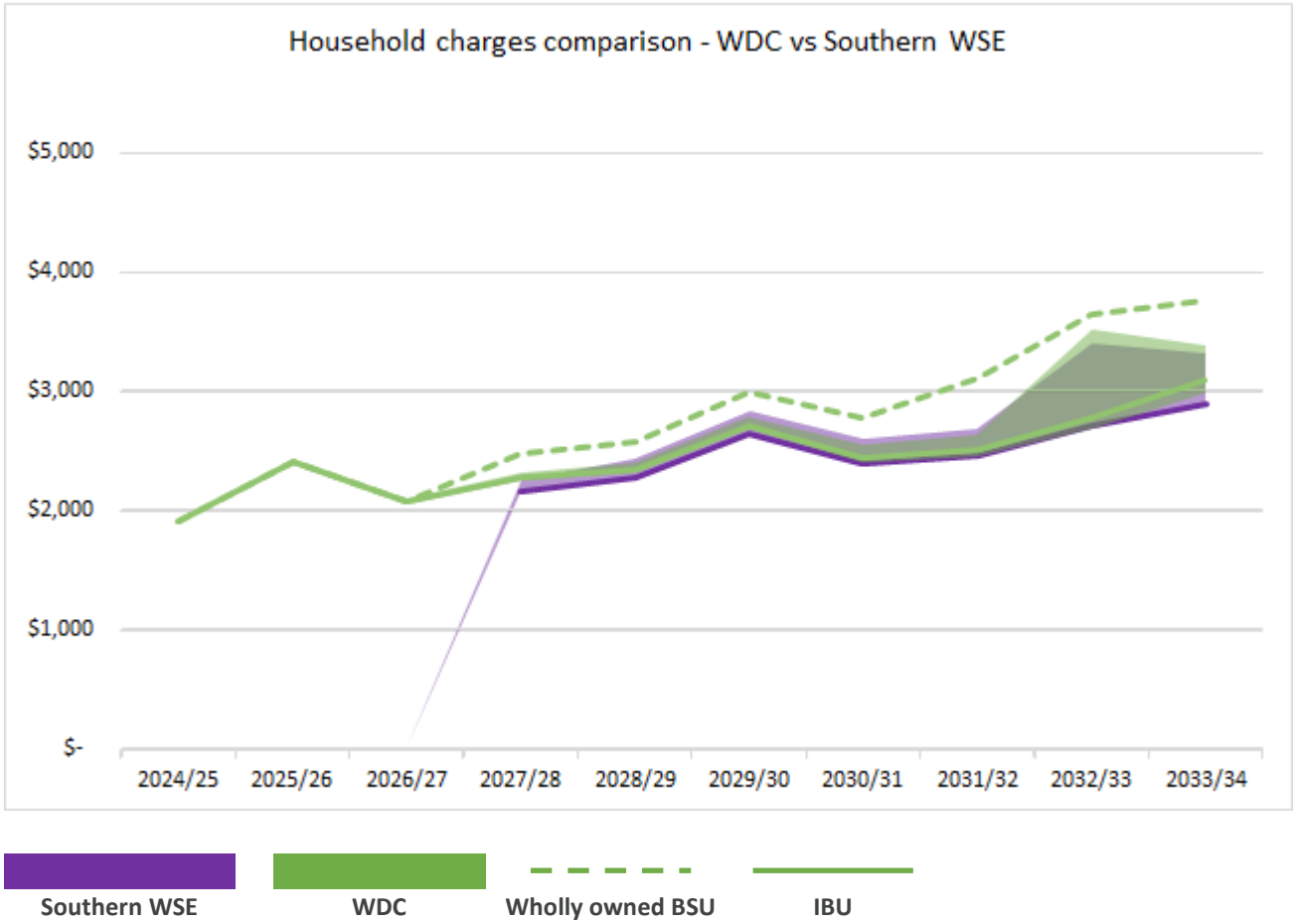
Household charges

The chart below shows the result of our model for Waitaki of:

- An in house business unit
- A wholly owned WSE (represented by the dotted line), and
- A local price charged by a Southern WSE.

We have shown price paths for the in house business unit and the Southern WSE as a range (shaded area) and a single line representing our current best estimate of the likely capital works programme for WDC.

Figure 18 Household charges for WDC vs wholly owned and Southern WSEs



The chart highlights:

- A local price from the Southern WSE is likely to be lower than price under either of the alternative models for WDC, however the range of outcomes is similar to the internal business unit.
- A wholly owned WSE is likely to provide more expensive household charges for water consumers in Waitaki.

The impact of each model on household charges, based on the base case capital works programme, is also highlighted in the table below:

Table 7 Comparison of household three waters charge (incl GST) for WDC

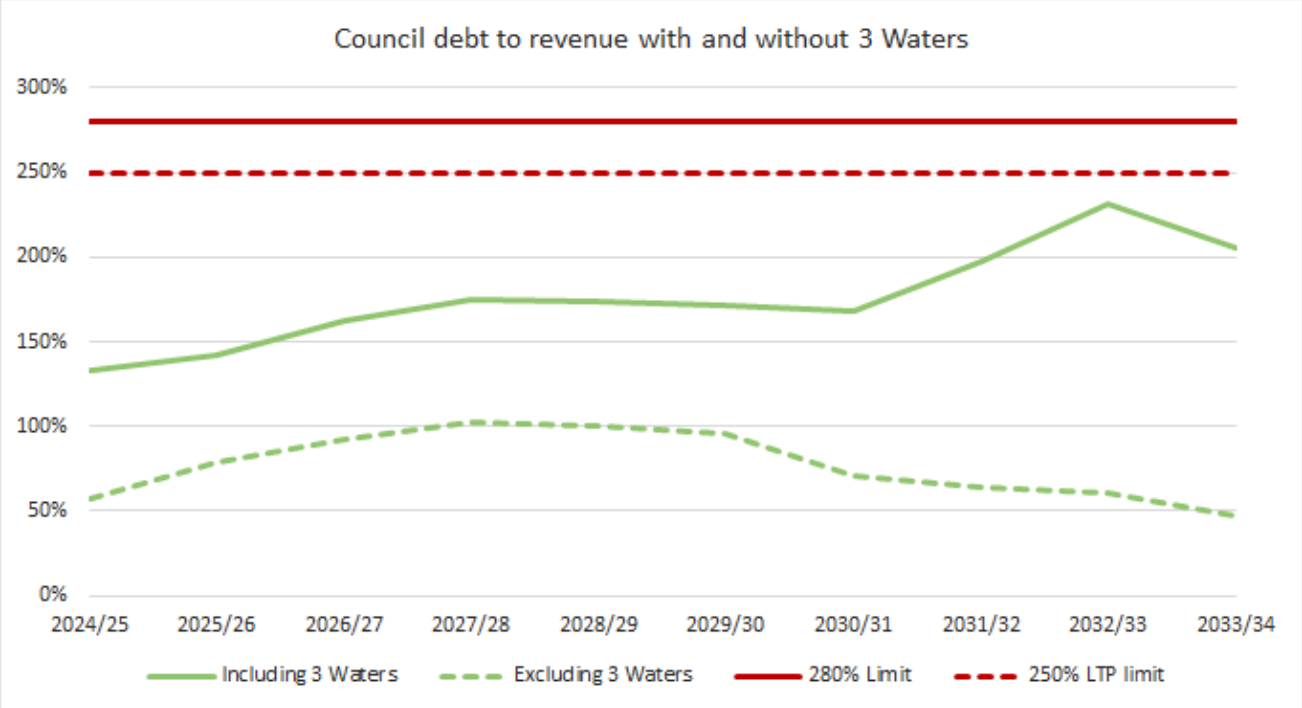
Entity	2024/25	2027/28	2033/34
In house business unit	$1,913	$2,269	$3,093
Wholly owned WSE		$2,466	$3,754
Southern WSE		$2,168	$2,894

Total Council debt to revenue

The chart below shows a comparison of total council debt to revenue with and without three waters debt being included. Both the wholly owned WSE and the Southern WSE would result in three waters debt and revenue no longer impacting Council's borrowing limits.

It shows that, without three waters debt and revenue, WDC would improve its debt to revenue ratio from 205% to 48% by 2034. This represents an increase in potential borrowing headroom of $95 million.

Figure 19 WDC debt to revenue with and without three waters



Impact of wastewater standards

Draft wastewater standards were released on 25 February 2025 and have not been fully reflected in our view of the capital works programmes for all of the councils included in the modelling presented earlier in this report.

However, as noted in the report from Utility NZ (**Appendix Four** - Southern CCO Programme Assurance Findings), the impact of these standards on capital works programmes is likely to be significant in some cases. However, there are still too many unknowns with the new standards, and each councils respective consenting pathways to be able to fully quantify this impact.

Councils with WWTP upgrades occurring in the next 3 years, which there are very few, will be allowed a two-year extension under the new standards. This will have further impacts on capital programmes, potentially resulting in deferral of currently planned investment into future years, and a delay in seeing the full impacts of potential cost reduction.

Any reduction to the capital works programme that arises as a result of changes to the wastewater standards or reductions in the scope of other programmes of work would have the impact of reducing likely charges for the relevant councils and the Southern WSE. A high level assessment of the likely impact of changing standards is discussed in the report from Utility NZ.

Appendix One - Non financial MCA

Otago Southland MCA for water service delivery options Multi Criteria Analysis							
Options		**Option 1: inhouse business unit**		**Option 2: standalone CCO**		**Option 3: Multi council Water Service Entity**	
Description of option		**Financial ringfencing No significant changes to service delivery approach Minimum changes to meet legislative requirements**		**Establishment of a separate comapny with its own Board, CEO and management strucutre. 100% owned by a single council. Financial separation from councils. May share or procure services from council**		**Establish a jointly owned three waters CCO. Pricing assumed to be determined under a "no one worse off principle". Equal shareholding across all councils. Assumes a gradual transition away from reliance on councils for the provision of services.**	
Assessment Criteria	**Weighting**		**Comments**		**Comments**		**Comments**
To deliver three waters services in a way that reflects the importance of water to the health of our residents, visitors, environment and economy.	20.0%	0	Services will continue to be compliant, reliable and continuous. Investment will be directed by an economic regulator, however may be influenced by broader affordability concerns and debt constraints within existing councils.	1	Services will continue to be compliant, reliable and continuous. Investment will be directed by an economic regulator, and the CCO will only be impacted by its own borrowing and affordability constraints.	2	Services will continue to be compliant, reliable and continuous. Investment will be directed by an economic regulator, and the CCO will only be impacted by its own borrowing and affordability constraints. Access to a braoder set of expertise, and improved financial and workforce resilience arising from increased sclae may improve reliability of the network and allow for the adoption of innovative solutions with improved outcomes
To deliver three waters services that sustainably respond to change in population, economic activity and climate change.	20.0%	0	Asset management planning will be completed within the same location as district planning and consenting. This may allow for more accurate or timing planning of growth investment. Access to skills, or opportunities to build network resilience through "cross border" investment may be limited.	-1	Separation of district planning and consenting functions will require close working relationships to be established to ensure network investment is aligned with growth.	1	Separation of district planning and consenting functions will require close working relationships to be established to ensure network investment is aligned with growth. There may be opportunities for "cross border" solutions to be adopted to respond to or mitigate the risk of changing demand due to climate change, changing population and economic activity. A larger geographic reach improves resilience to local economic or environmental shocks.
To deliver three waters services through a model that is responsive to the local needs of our communities.	20.0%	0	Investment and planning is closely linked to broader objectives and planning for councils. A direct link between governance and the democratic process allows for direct community accountability. Workforces, including high values jobs, remain local. Decision making and accountability will be reduced compared to current arrangements due to the influence of the economic regulator and Taumata Arowai.	0	Decisions regarding investment are made largely independently of decisions made the the shareholding council. However, decision making remains local, with investment only occuring within district. Board members will be appointed by councillors, but will not be directly accountable to , or elected by, the public. Instead they will be accountable to consumers Decision making and accountability will be reduced compared to current arrangements due to the influence of the economic regulator and Taumata Arowai. A wholly owned water CCO is likely to maintain close relationships with parent councils and may share some funcitons, such as customer services.	-2	Decisions regarding investmetn are made based on a "best for network" approach with investment being prioritised across the combined districts when resources are scarce. Workforce, including high value jobs, may move out of the district, however modern working environment will likely allow staff to live where they choose. Local workforces will remain for network and treatment operations. The model may include procuring some shared services from councils such as customer services.
Provide efficient and effective services through a model that supports robust decision making and the development of enduring capability and capacity	20.0%	0	Decision making will be influenced by the economic regulator, Taumata Arowai, and elected members (who may not have relevant infrastrctuure, risk management or financial expertise). There will be no improvement to recruitment or retention of staff compared to current arrangements, with competition for good staff between districts and larger jont water entities persisting.	-1	There will be a singular focus from the board and management on the delivery of three waters services. There will be no meaningful increase in scale compared to the in house delivery model. Opportunities for career development and progression will be low, and any improvements in ability to attract and retain good staff will be marginal compared to the in house model. Competition for good staff between districts and with larger joint water entites will remain. Lack of scale means loss of a single staff member may have singificant negative implications of such an entity.	3	Scale will provide increased opportunities to find efficiencies through procurement and improved network wide investment. Scale will also provide improved career development opportunities improving the ability to atttract and retain good staff, to support improved decision making. There will be a singular focus from the board and management on the delivery of three waters services.
To ensure that three waters services are delivered through a model that is enduring and financially sustainable.	20.0%	0	The in house delivery model will have ring fenced financial management for three waters services meaning no cross subisidation to/from other activities of Council. Water services may continue to levarge council's ability to borrow at a parent level, which in siome cases will result in increased access to debt, however this will impact the councils ability to borrow for other activities. This option will be less affordable than a Jointly owned CCO. Economic regulation should provide some assurance of financial sustainability.	-1	The entity will manage its own revenue and debt, providing it with financial independence. Gaurantees or provision of uncalled capital from Council will ensure a level of sustainability and lacks finacnial sustainability. Council will have improved borrowing capacity to finance non-three waters projects. Economic regulation will provide some safegaurds regarding financial sustainability, however a lack of scale and geogrpahic reach will mean the entity may be impacted on local economic or environmental shock.	2	The entity will manage its own revenue and debt, providing it with financial independence. Gaurantees or provision of uncalled capital from shareholding Councils will ensure a level of sustainability. Council will have improved borrowing capacity to finance non-three waters projects, and the entity will have favourable lending covenants. Economic regulation will provide some safegaurds regarding financial sustainability, additionally, a broader geographic reach will provide more resilience to changing local economic and environmental conditions.
Total score (out of three with a range of -3 to 3)		**0.00**		**-0.40**		**1.20**	

Appendix Two - Local Water Done Well Review: Otago & Southland Three Waters October 2024

Current state overview

Otago & Southland three waters

August 2024

Document status

Job #	Version	Written	Reviewed	Approved	Report Date
2927	DRAFT	S.Cross & R.Slater	D.Bonifant	D.Bonifant	12 August 2024
2927	FINAL	S.Cross & R.Slater	D.Bonifant	D.Bonifant	30 August 2024

Contents

Introduction and approach

Context

Following a widespread outbreak of gastroenteritis in Havelock North in 2016, the Government undertook a significant programme of work which resulted in:

- Updates to the drinking water standards
- The establishment of a drinking water supplier (Taumata Arowai)
- Identification of a range of systemic issues relating to the sustainable provision of three waters services across the country.

Over the period that followed there have been a number of attempts at changing the service delivery model for three waters services, including voluntary investigations completed by the councils in the Waikato and Hawke's Bay regions, and centrally led reviews which resulted in the previous Government's proposed "Affordable Waters" programme.

The "Affordable Waters" programme has now been repealed and replaced with a new programme called "Local Water Done Well". Under Local Water Done Well:

- Council's will be required to develop "Water Services Delivery Plans". These plans will need to demonstrate how councils will manage and invest in their three waters services to meet current and future standards, and remain financially sustainable
- Councils will be supported to voluntarily work together to combine services for more efficient and effective delivery
- New CCO models will be developed to allow councils to separate the finances (including debt) for three waters services from shareholder councils' balance sheets.

This report is the first stage of work completed by the councils of the Otago and Southland regions under the Local Water Done Well programme. The approach is to undertake work on a first principles approach (though drawing on data collected through previous studies), to identify a "no regrets" improvement pathway for service delivery in the two regions.

Specifically, this first stage of work is intended to:

- Highlight the key local and regional challenges
- Identify areas of common interest, complimentary issues, and clear opportunities
- Determine the strategic objectives that will be used to assess the likely effectiveness of potential improvement models; and
- Develop a long list of options to be considered.

Currency of data

The change in government and consequential repeal of the previous Government's Three Waters reform programme resulted in significant changes to planning assumptions made by councils in the development of their 2024/34 Long Term Plans. As a result, councils were given the opportunity to delay the adoption of their Long Term Plans by up to 1 year.

We have relied on the *latest* adopted/approved financial and asset information available for each council in the analysis included within this report. Where councils have elected to delay their Long Term Plans by a year, this information typically relates to either the 2021/31 LTP or early internal drafts of the 2024/34 long term plan that were prepared prior to the decision to defer. A detailed description of our approach to analysing the data provided from council's 2021 long term plans is outlined in Appendix One.

Combined regional view

A common set of challenges

The future delivery of three waters services across New Zealand faces challenges from a wide range of converging issues. However, these issues are typically able to be grouped into three common themes:

1. A need for significant investment in infrastructure, including:
    - Long held resource consents nearing expiry
    - Ageing infrastructure and increased renewals investment requirements
    - The increasing need to invest in, and utilise, technology to meet regulatory requirements for the provision of water and wastewater services
    - The condition of assets
    - Increasing or changing regulatory standards and intervention, including requirements to discharge treated wastewater to land rather than freshwater
    - Changing demand
    - Climate related pressures including increased frequency of droughts and severe wet weather events.
2. Increased financial constraints, including:
    - The need to significantly increase rates or other revenue that needs to be collected to fund service provision
    - A reduction in available borrowing capacity
    - The difficulty in funding significant infrastructure investment in small or remote communities
    - Ensuing affordability concerns for impacted communities
3. Challenges with the recruitment, retention, and development of skills, experience and expertise.

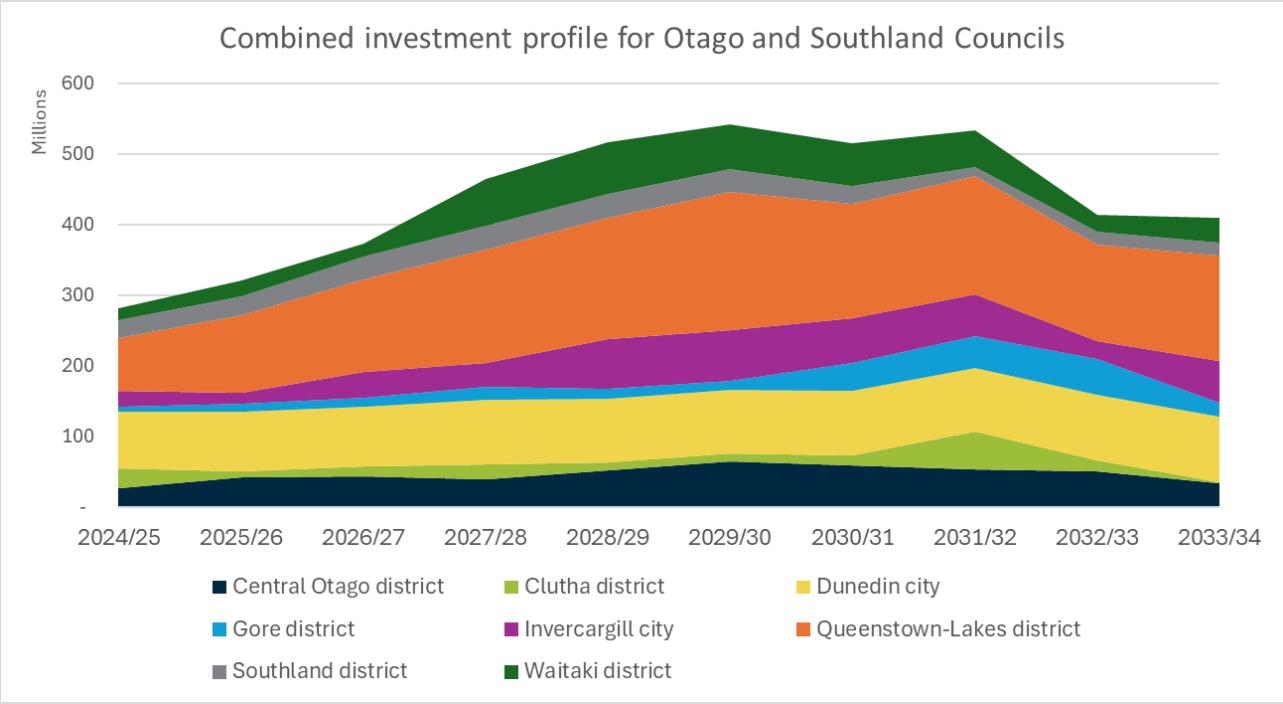
The Otago and Southland regions are no different. Our analysis of the current state challenges is summarised in the following section and in the individual council analysis. The analysis identifies that:

- The Otago and Southland regions are facing a wave of investment required from a large number of expiring wastewater treatment consents, ageing infrastructure and significant population growth at a local level.
- A rapid increase in total borrowings to fund investment in three waters infrastructure. In some cases, councils which have historically held very low levels of debt are now projected to exceed borrowing limits that have been imposed by the Local Government Funding Agency (LGFA).
- Large rates rises for the ongoing provision of three waters services. The three waters residential rates in some areas are anticipated to increase up to five-fold over the next ten years. This will raise significant affordability concerns for these communities.
- Our work in 2021 highlighted recruitment challenges across both regions, with vacancy rates averaging 13% across the two regions. Conversations with key staff through this piece of work have identified that recruitment and retention challenges have not improved significantly since that earlier work.

Investment requirements

The combined investment profile for the Otago and Southland councils features a $4.3 billion programme of work, across eight councils. The work programme almost doubles from $280 million to over $540 million dollars of planned annual capital delivery between 2025 and 2030.

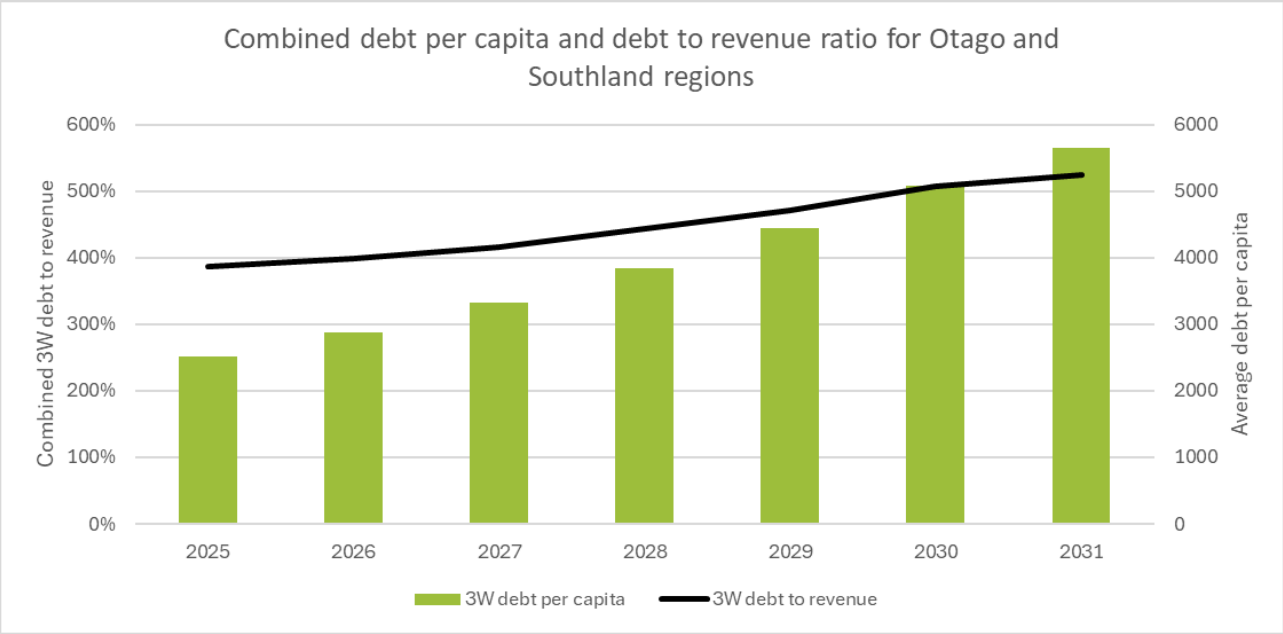
There is a significant delivery challenge associated with scaling up to such a large programme of work. The delivery of a three waters work programme that is double the current scale not only requires the funding but would require a significant increase in contracting, engineering and project management resources across the regions.



Borrowing requirements

Financing a $4.3 billion dollar work programme requires significant borrowing. Total three waters debt across the Otago and Southland Councils is expected to reach $2.2 billion by 2031 on conservative projections[1].

On a per capita basis, debt across the combined regions will more than double from $2,500 per person to over $5,600 per person in 2031. Servicing and repaying that debt will add $450 to the average annual three waters rates bill.



As three waters infrastructure has been the largest contributor to borrowing for councils, when considered in isolation three waters debt is likely to exceed 500% of three waters revenue in 2031.

Proposed financial arrangements announced by the Government on 8 August 2024 reference LGFA's willingness to lend to an effective rate of 500% of three waters revenue. We understand that it is unlikely that lending covenants will actually be measured based on debt to revenue, but rather an alternative benchmark will be used.

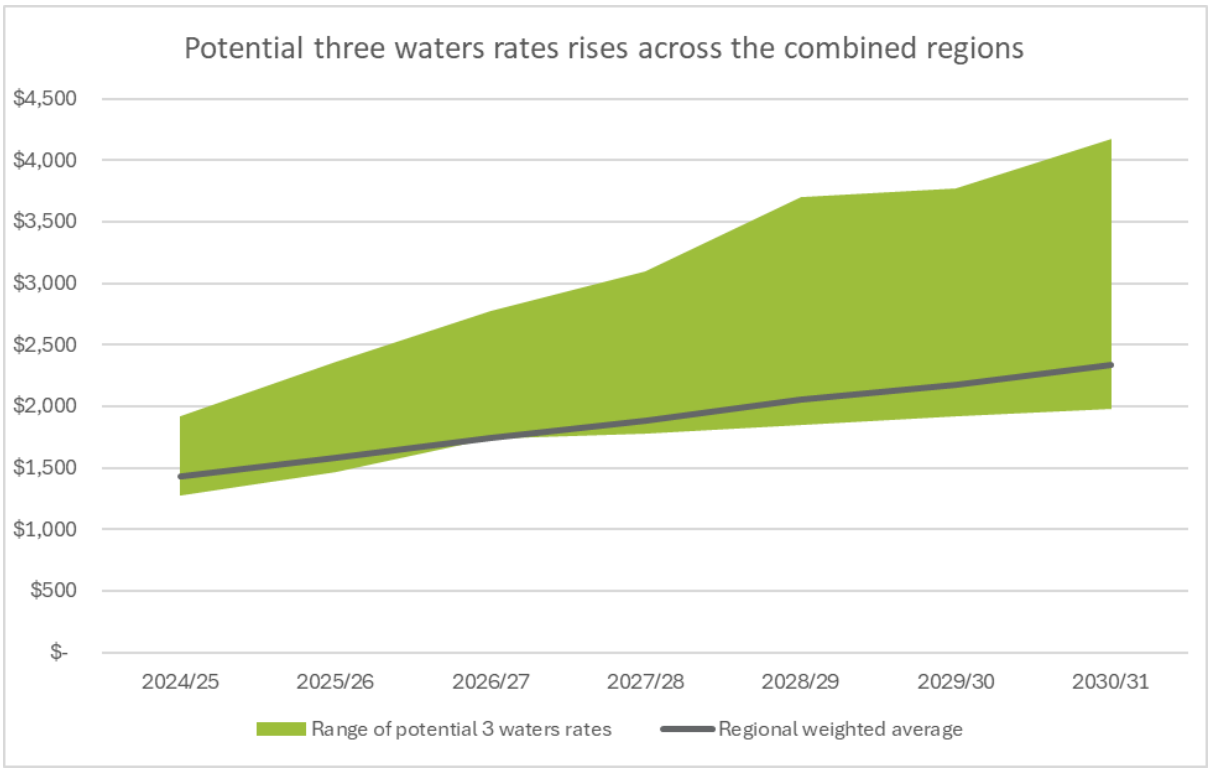
[1] These projections include debt projections based on modified 2021 LTPs for some councils. Given significant uplifts in capital works programmes from 2021 to 2024, we would expect debt to be higher than this in 2031.

Rates rises

Three waters rates across the Otago and Southland regions are predicted to rise significantly over the next seven years. Some communities are projected to experience increases of more than 160% to their existing residential three waters rates bills during that time period. By 2034, some councils will have three waters rates that are up to five times larger than they are in 2025. For some councils, this means a rapid increase in rates in the final years of their LTPs.

While there is significant variation across the regions, the affordability of three waters services and rates is likely to become a key consideration for all councils moving forward. Regionally, the weighted average residential rates will increase at least 63% from $1,435 in 2025 to over $2,350 in 2034.

This may be compounded by the announcements made on 8 August 2024 that indicated a future economic regulator will have the power to set minimum and maximum levels of investment and revenue, thereby restricting councils ability to smooth investment and rating impacts.

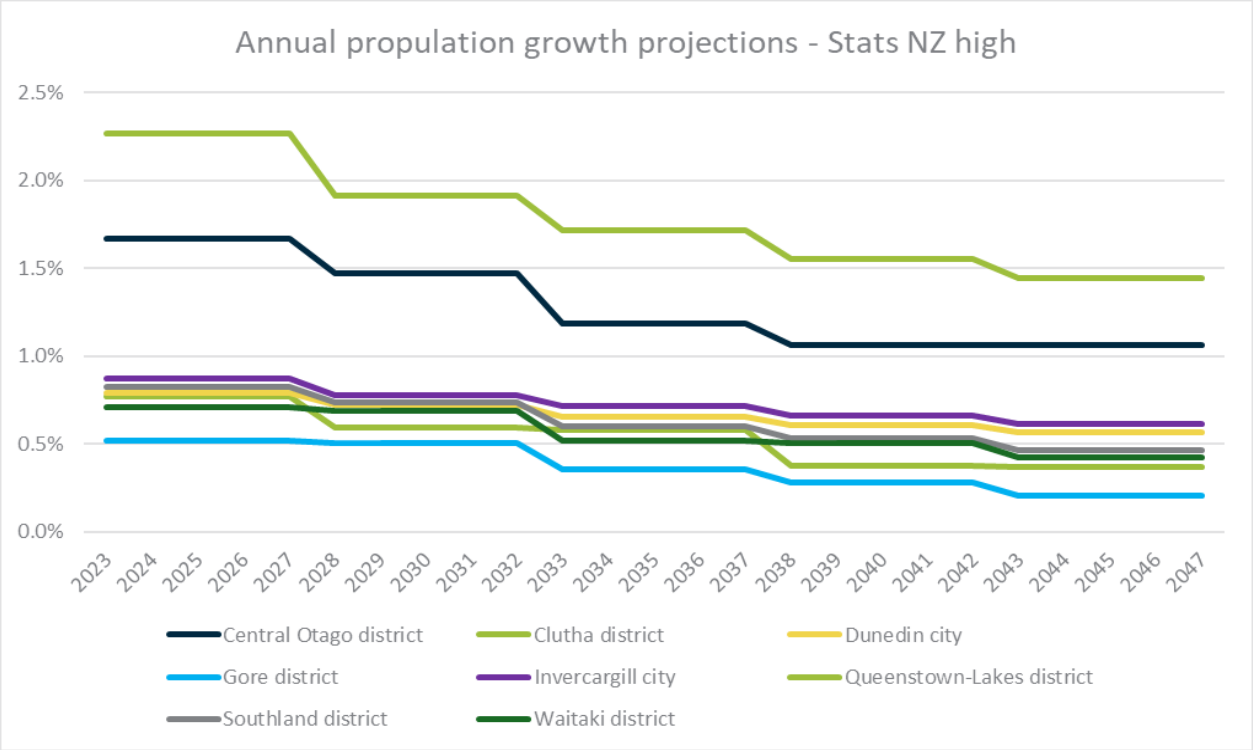


Local context matters

While there are clearly common themes that impact the future sustainability of providing three waters services in Otago and Southland, the local context for those issues differs significantly across councils. This local context helps to identify how similar challenges may need to be resolved through different approaches.

Some councils are experiencing rapid growth

The councils in Otago and Southland are vastly different in terms of their growth profile and population projections. While population is expected to continue to grow rapidly in areas such as Queenstown Lakes District Council (QLDC) and Central Otago District Council (CODC), in areas such as Southland District Council (SDC) and Gore District Council (GDC), population is expected to remain relatively stable.



The two Councils that are experiencing the highest levels of growth in the Otago and Southland regions (QLDC and CODC) have a combined three waters capital works programme of $966 million just to respond to provision of infrastructure to support that future growth. This represents approximately half of the three waters capital works programme for both Councils.

While Dunedin City Council (DCC) has allowed approximately $68 million for three waters growth infrastructure between 2024 – 2034, the remaining councils in the Otago and Southland regions have only forecast incidental expenditure on growth projects over the LTP period.

Servicing the growth that is occurring in QLDC and CODC requires significant organisational effort and planning. It can also have significant financial implications because development contributions that are used to fund that growth infrastructure are often received over time, meaning councils must borrow to fund its construction.

Growth councils require careful planning to ensure infrastructure is provided to support development just in time for the development to occur, and to ensure that consents, treatment plants, pump stations and bulk water/wastewater pipelines are appropriately sized to address future demand.

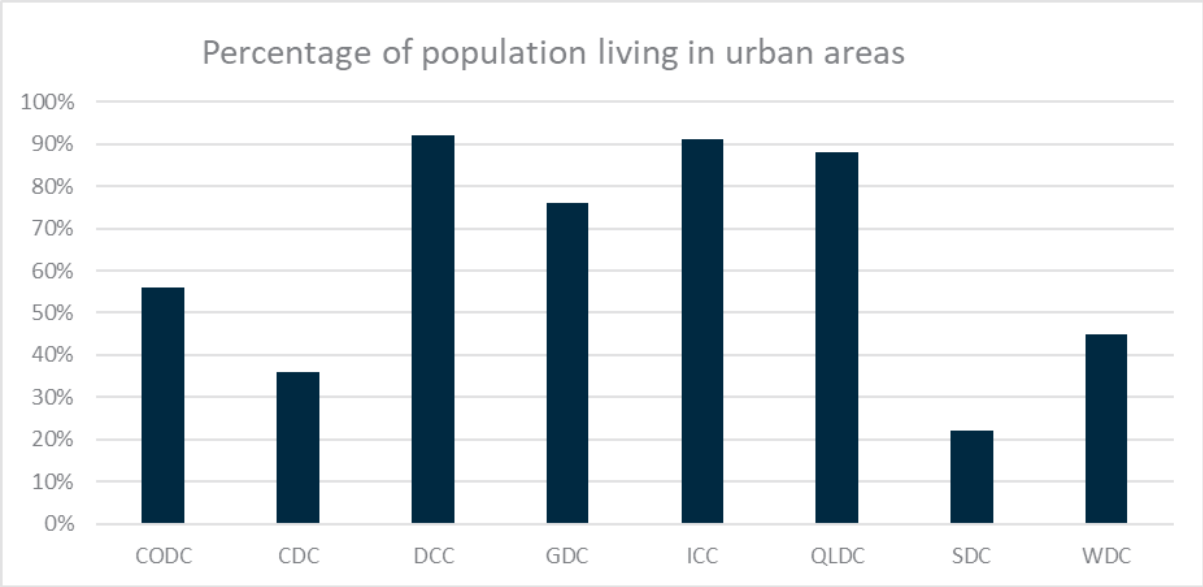
Addressing future growth demands is likely to become even harder following recent announcements by the Minister of housing. Tier one and two councils under the national policy statement on urban development will now be required to provide up to 30 years of plan enabled development capacity. This will likely require further investment in growth infrastructure.

Some councils have many small communities

Provision of water, wastewater and stormwater services is becoming increasingly expensive as drinking water, environmental, and health and safety standards continue to become more stringent. These increasingly stringent standards are requiring significant investment to be made, particularly in wastewater treatment plants.

The Otago and Southland regions include a mixture of highly urbanised and largely rural populations. DCC has as many as 92% of its residents living in an urban environment. Invercargill City Council (ICC) and QLDC each have greater than 85% of their population living in urban areas.

By contrast, Clutha District Council (CDC), Waitaki District Council (WDC) and SDC each have fewer than half of their population living in urban areas. Only 22% of SDC's population live in urban areas.



The costs of meeting increasingly stringent regulatory standards is particularly notable in small and rural communities, where costs are spread over a very small number of ratepayers. While some councils have adopted district wide charging to deal with this, these small schemes are still difficult to maintain economically.

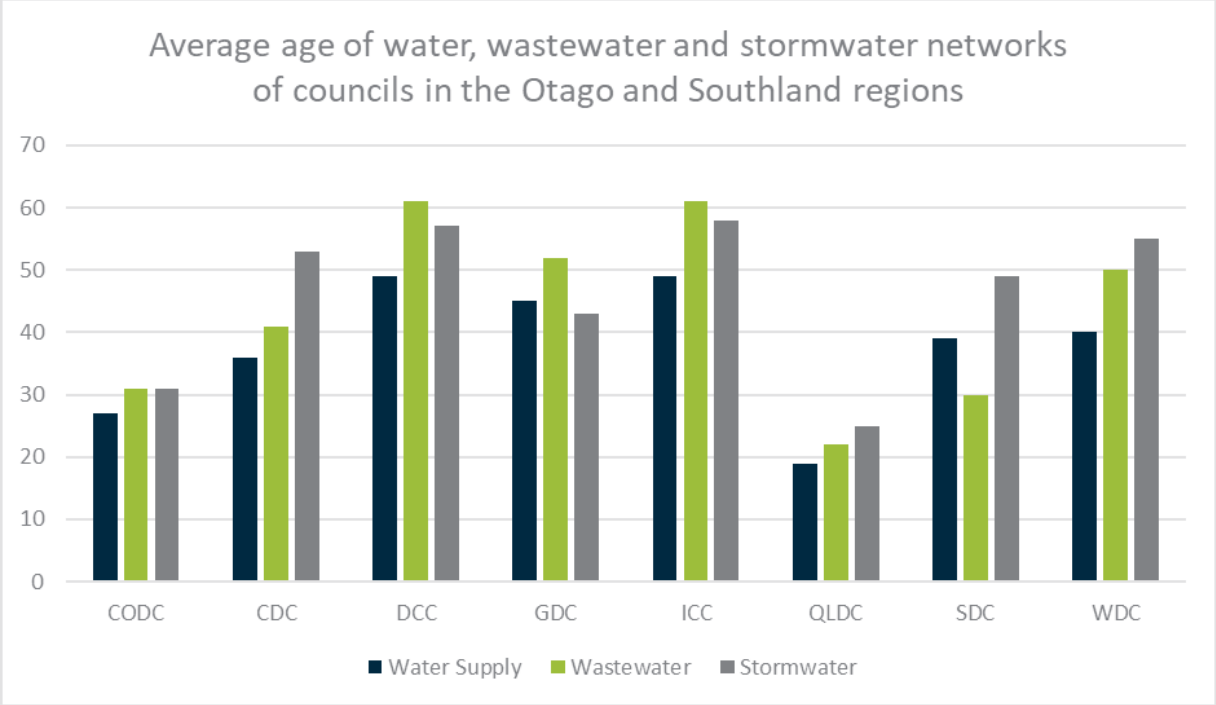
In most cases councils with multiple small townships also have comparatively low populations. Further, when a large proportion of a district's population lives in small townships, spreading costs is simply a matter of timing. While some townships may have (comparatively) expensive upgrades due in the next five years, the remaining townships may have similarly expensive upgrades due in the following 5 years.

Managing small schemes cost effectively requires a different approach to the management of three waters services in highly urbanised environments.

Some councils have older networks than others

While age is not the sole determining factor about whether a water, wastewater, or stormwater network is in good condition or needs to be replaced, in the absence of high-quality condition data or asset performance information, it can be a good indicator.

The Otago and Southland regions contain some of the oldest townships in New Zealand. As a consequence they also have a number of long lived assets. DCC notes in its infrastructure strategy that its main sewerage interceptor dates back to the early 1900s and is still in use. DCC also has a number of other assets of similar age.



Ageing infrastructure and the pending "renewals bow wave" are issues that have been frequently cited as major challenges for the waters sector in New Zealand. As could be expected, aging infrastructure is often in poor condition, or may be leaky due to age or material. Leaky water networks mean high rates of water loss, contributing to the need for water restrictions during summer, while leaking stormwater and wastewater overflows can lead to inundation of the wastewater network causing overflows of raw sewerage and potential consent breaches.

Councils with older networks such as ICC, DCC, WDC and GDC are expected to undertake a significant programme of renewals over the next 10 years. These councils are expected to spend over $850 million in three waters renewals over the next 10 years, or around half of their combined three waters capital works programme.

Among the issues lie a range of opportunities

The scale of the three waters infrastructure challenges facing the Otago and Southland regions is substantial. While the underlying causes for the increased level of investment facing councils may differ, there are a number of clear opportunities for collaboration that could be explored.

Examples of where further opportunities could be explored, or may be leverage as part of any new service delivery model include:

- Exploring opportunities for networks to be connected in neighbouring areas. There are only likely to be a small number of these opportunities (for example the Clifton and Winton wastewater treatment facilities) that are economically viable. However, combining networks is likely to give effect to longer term operating efficiencies and improved network resilience. There is nothing to prevent such opportunities to be explored currently.
- A number of Council's have in house operations and maintenance teams that work on part or all of their water and wastewater networks. These councils currently need to employ a large enough workforce to ensure adequate cover for after hours, and annual and sick leave of staff. Developing a shared workforce between neighbouring councils would provide more workforce resilience, and potentially enable operational efficiencies.
- All councils have significant capital works programmes ahead which will require engagement of specialist contractors to complete. However, given the comparatively remote location of the Councils of Otago and Southland, and the distance from most major population centres in New Zealand, attracting large scale contractors can be challenging. Alignment of procurement and project management approaches, and coordination of large scale work programmes would likely assist in attracting contractors to the regions.
- Councils across Otago and Southland differ in terms of the local context which influences their three waters investment and service delivery needs. These differences create further opportunities in a shared service model, as the increased scale will allow for increased specialisation of roles. For example, councils may be able to pool resources to have dedicated development engineering, design engineering, urban and rural water specialists, and project management skills that would otherwise be out of reach.
- Increased scale may allow for specialist equipment to be jointly acquired, for example CCTV equipment for condition assessment or equipment to aid leak detection.
- There may be funding and financing opportunities available through the ability to leverage a combined balance sheet and revenue base. The Government's announcements of 8 August 2024 indicated that wholly owned three waters CCOs may be able to access borrowing up to 500% of its revenue, and for that borrowing to be kept off a council's balance sheet. However the terms, including the interest rate, of that borrowing will be determined by LGFA based on its assessment of risk and credit worthiness. This means that bigger entities, with bigger asset and customer bases, may be able to access more or cheaper debt than their smaller counterparts.

Central Otago District Council

24,306 population (2023)

18,875 people serviced with water supplies

7 wastewater treatment plants

8 water treatment plants

453 km water supply pipes

73 km stormwater pipes

264 km wastewater pipes

28 water connections per kilometre

56% of people live in urban areas

$85,900 average household income (2019)

Key issues

Growth

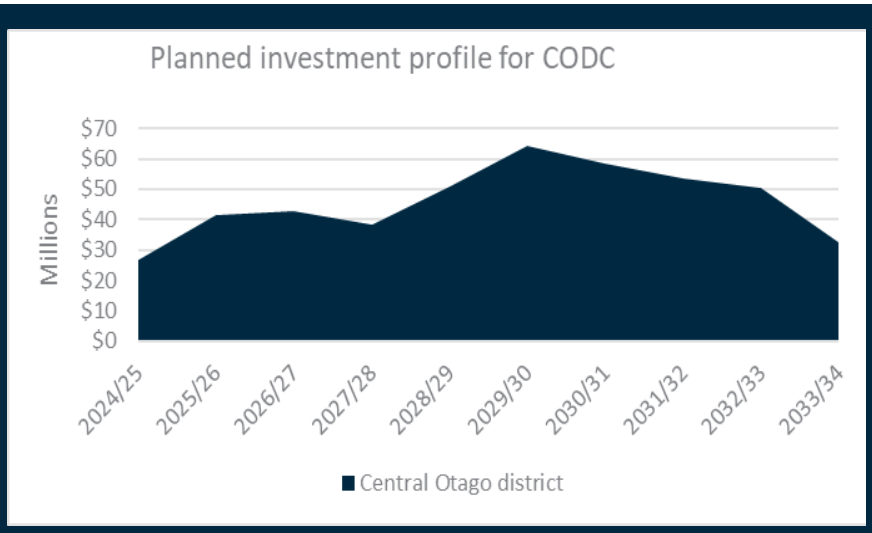
The CODC district has very high population growth in some of its townships. 53% of its planned capital works programme, totalling $244 million is intended to address growth pressures.

Small communities

Servicing small communities and balancing the need for significant investment in those communities in the future. Six of CODC's registered drinking water supplies service townships that individually have fewer than 1,000 people connected.

Affordability

To meet estimated investment needs in three waters, average three water rates are projected to increase 80% from $1,900 to over 3,450 by 2034.



$458 million of planned investment over 10 years

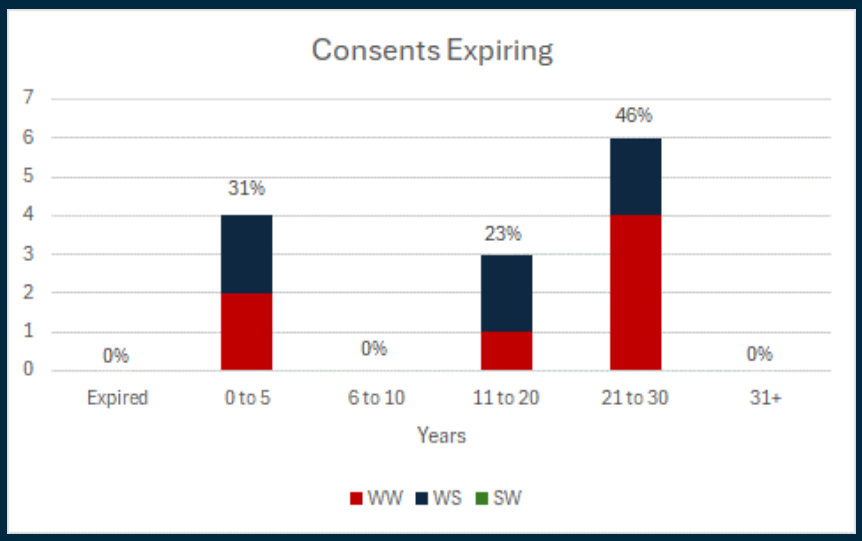
CODC's three waters capital works programme peaks at $64 million per year in 2029. For context, that's over 50% more than its entire capital works programme in 2024.

This investment profile is likely to reduce by up to $100 million due to recent government announcements that suggest discharge to freshwater environments will be permitted and fit for purpose water treatment for small supplies.

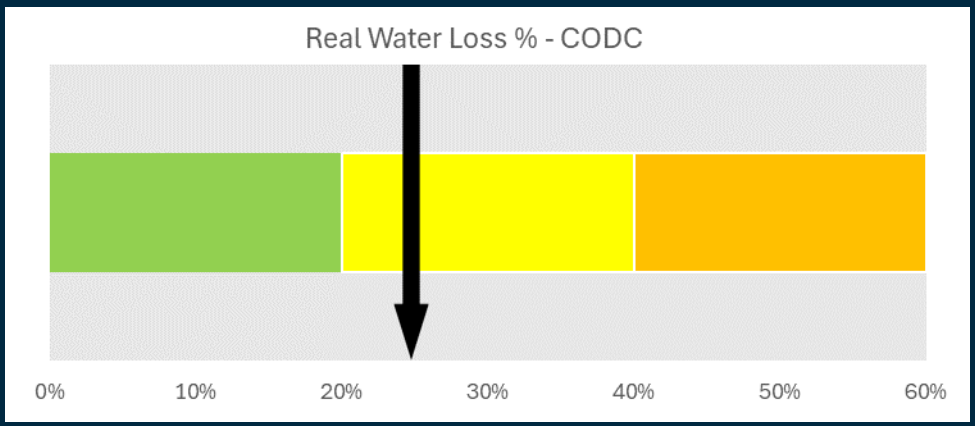
Expiring consents

CODC has four consents that are due to expire in the next 5 years. The two wastewater consents are for Alexandra and Omakau.

Both currently discharge to freshwater receiving environments. The additional financial impacts of discharging to land (if required) are expected to be in the order of $60 million - $70 million combined.



Network performance



CODC experienced an estimated 26% real water loss in the 2023 financial year, which is in the lower half of councils in the Otago and Southland regions. Water loss in 2022 was 25%.

There were 2.75 dry weather overflows of the wastewater network per 1,000 connections in 2023.

Compliance

CODC was not fully compliant with the drinking water standards in 2023, non-compliance related to a lack of Protozoal barriers in its Ranfurly, Patearoa, Cromwell and Omakau supplies. It also had supplier notifications for MAV exceedances in its Roxburgh and Cromwell schemes and issued temporary consumer advisories for its Ranfurly and Patearoa schemes in 2023.

Area	22/23 results	22/23 Target	21/22 results	Trend[2]
Bacterial compliance	Not Achieved	100% Compliance	N/A	↔
Protozoal compliance	Not Achieved	100% Compliance	N/A	↔

CODC received 5 Abatement Notices and 2 Infringement Notices for its wastewater treatment plants in 2022/23, an increase from 3 Abatement Notices in 2021/22. Two abatement notices have since been lifted, with three remaining in place as at August 2024.

Demand management

CODC has experienced a period of rapid population growth since 2013. The average annual growth rate of 3.7% is much higher than the growth seen from 2006-2013 which was an annual average of 1.2%. Over the last two years this growth has slowed to a rate of 2.5% due to impact of Covid. Short term and long-term indicators suggest the population growth rate will continue at a rate similar to the last two years, rather than the more accelerated rate seen prior to that.

Water Consumption
516 ↓
(lpd/resident)

To respond to infrastructure pressures arising from Growth, CODC has provided for $244 million of investment in growth projects. Existing universal water metering also provides opportunities to address growth challenges.

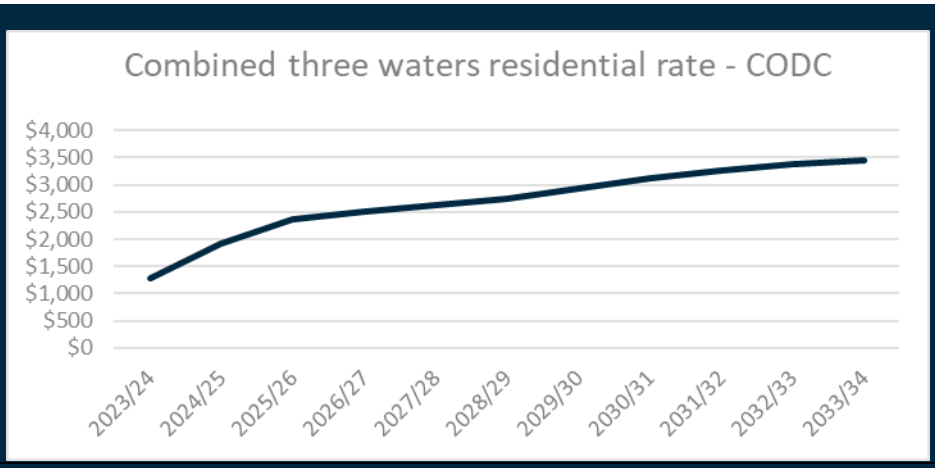
Network condition and age

CODC's water, wastewater and stormwater infrastructure has the second lowest average age of all of the councils in the Otago and Southland regions. Expected useful life of water infrastructure varies depending on a range of factors, including material, diameter, and operating conditions, however given the low average age of infrastructure, CODC is unlikely to have an immediate need for significant renewals investment.

Service	Age (avg)	C1	C2	C3	C4	C5	Unknown
Water Supply	27	84%	8%	5%	1%	2%	0%
Wastewater	31	86%	9%	3%	2%	0%	0%
Stormwater	31	99%	0%	1%	0%	0%	0%

Condition assessment of CODC's three waters assets show a high portion of assets in Condition 1. Again, this indicates no immediate need for significant renewals investment, however we would have expected to have seen more of a distribution in the other condition grades.

[2] Compared to previous year

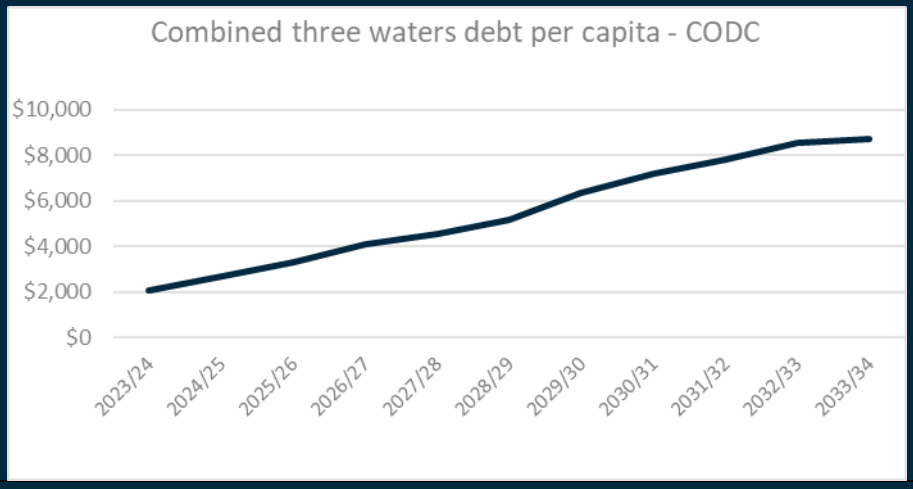


Three waters residential rates

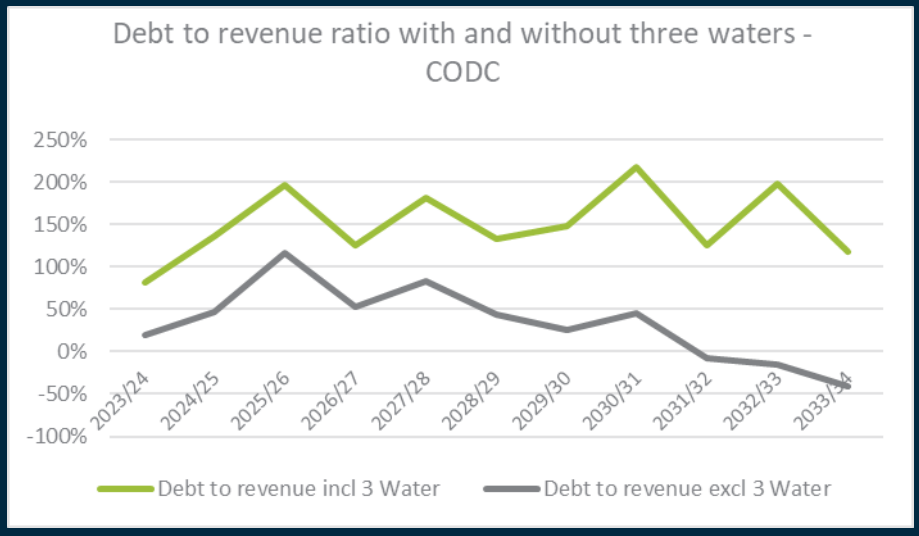
The average residential rate for three waters services in CODC is projected to more than double from about $1,300 including GST in 2024 to about $3,450 in 2034 according to early drafts of its 2024 long term plan (which was subsequently deferred).

Three waters debt

CODC's initial draft 2024 Long Term Plan forecast an increase in total three waters related borrowings from approximately $55 million in 2024 to about $297 million in 2034. This represents a four-fold increase in per capita debt, from about $2,000 per capita to about $8,700 per capita in 2034.



Whole of council debt



Over the period of the initial draft 2024/34 long term plan, CODC's debt was projected to grow to over 215% of its revenue; this is primarily because of intense capital investment requirements for three waters. The projections show CODC breaching LGFA's 175% debt to revenue limit for unrated councils in 2026, at which point CODC would need to obtain a credit rating.

Council expects to generate significant future revenue from the development of residential and industrial land in its district. This is the cause of the spikes in the chart above.

Clutha District Council

18,315 population (2023)

15,000 people serviced with water supplies

11 wastewater treatment plants

16 water treatment plants

2,505 km water supply pipes

57 km stormwater pipes

217 km wastewater pipes

3 water connections per kilometre

36% of people live in urban areas

$86,300 average household income (2019)

Key issues

Mixed use rural water schemes

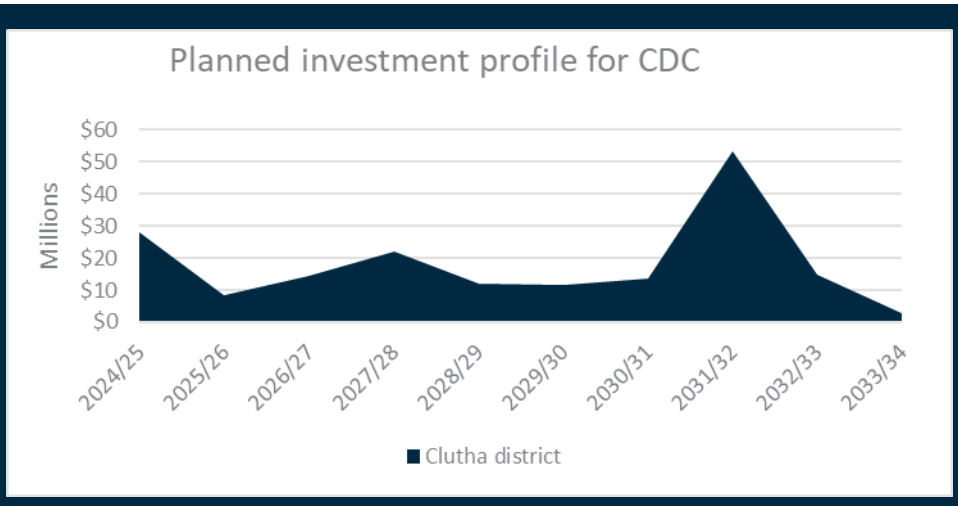
Council owns and manages 22 rural water schemes for domestics consumption and drinking water for stock. The ongoing costs of operation and maintenance of the schemes is expected to become unaffordable over time.

Low connection density

Council has one of the longest reticulated water networks in the country, and consequently the lowest connection density in New Zealand. Low connection density results in high costs to operate and maintain a network that services few people.

Compliance

Delivering drinking water that is compliant with drinking water standards has been challenging in a number of rural mixed use schemes in particular. 6,221 people connected to schemes had consumer advisory notices in place in 2023.



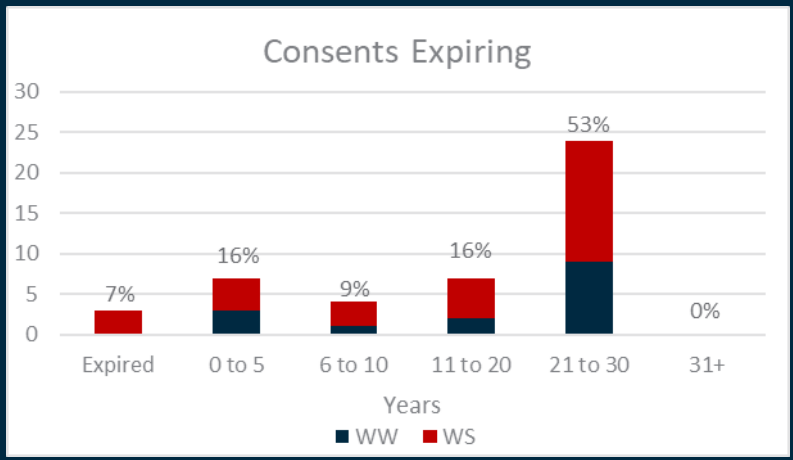
$181 million of planned investment over 10 years

The programme peaks at $53 million in 2032. For context, this is about equal to CDC's entire planned capital works programme (for all activities) in 2024.

Expiring consents

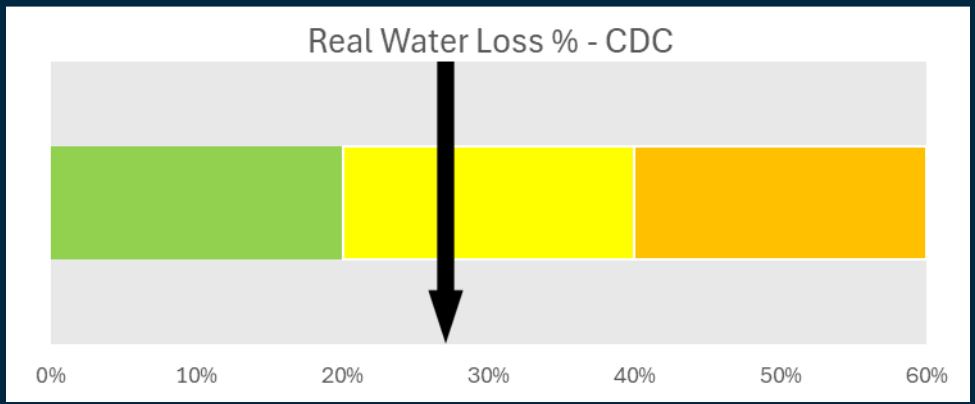
CDC has three water supply consents that have expired and 7 that expire in the next 5 years. There are a large number of consents (24) that expire in the years 21 to 30.

CDC has 45 resource consents across its 27 water and wastewater treatment plants. Some treatment plants have more than one applicable consent.



Network performance

CDC experienced 28% real water loss in the 2023 financial year. This is average for the councils in Otago and Southland. regions.



There were 4.19 dry weather overflows of the wastewater network per 1,000 connections in 2023. CDC's wastewater network met its target levels of service in the last two years, although with 4.19 dry weather overflows is worse than most other councils in the Otago and Southand regions and their targets are all also lower than CDC's.

Compliance

All 14 of Clutha's drinking water schemes have bacterial barriers, protozoal barriers, and residual disinfection in place other than Tuapeka West (which is to be replaced with the Greenfield Bore scheme).

Notwithstanding this, all schemes other than the Lawrence and Balclutha schemes issued supplier notifications to Taumata Arowai regarding unsafe, or maybe unsafe, drinking water. Eight of the 14 schemes had consumer advisory notices issued during the 2023 year, of which six were permanent advisory notices.

Area		22/23 results	22/23 Target	21/22 results	Trend[3]
Bacterial compliance	Urban	0%	100% - Not Achieved	81%	↓
	Rural	0%	94% - Not Achieved	39%	↓
Protozoal compliance	Urban	0%	>89% - Not Achieved	49%	↓
	Rural	0%	>66% - Not Achieved	0%	↔

Seven schemes exceeded Maximum Allowable Values for aluminium in 2023.

CDC received 7 Abatement Notices and 3 Infringement Notices for its wastewater treatment plants in 2022/23.

Demand management

The Clutha district is not expected to experience significant population growth in the near future. Changes in demand owing to population or economic growth are therefore not expected to create any significant challenges for the district moving forward.

Water Consumption
530 ↓
(lpd/resident)

A number of Clutha's existing surface water takes already have low flows, particularly during summer months. Any future increases to minimum water flow levels that may be imposed as part of future consent renewals may require CDC to find alternative water sources or implement further demand management strategies for those affected scheme.

Network condition and age

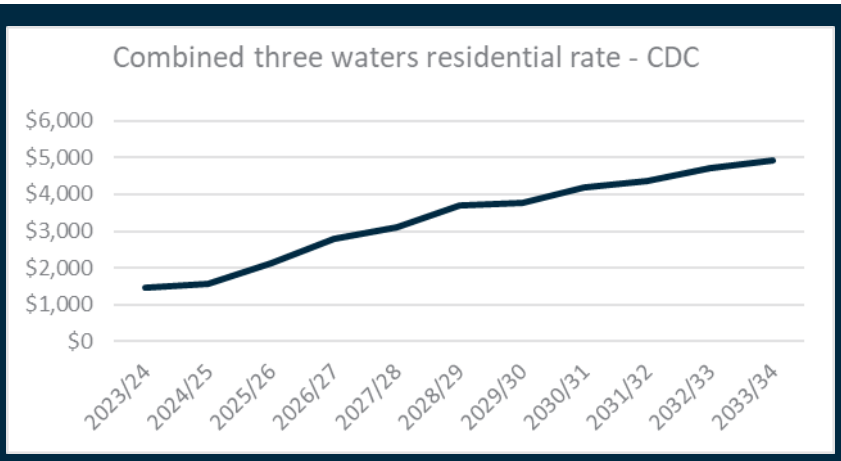
The age of each of CDC's water, wastewater and stormwater infrastructure is about average for the councils in the Otago and Southland regions.

CDC notes in its asset management plan that the impacts of an ageing network are becoming evident now, particularly in relation to its concrete and asbestos cement water supply reticulation assets.

Service		Age (avg)	C1	C2	C3	C4	C5	Unknown
	Water Supply	36	28%	2%	5%	2%	1%	62%
	Wastewater	41	49%	32%	13%	1%	2%	3%
	Stormwater	53	20%	62%	6%	5%	5%	2%

A large quantity of the water supply network has yet to be condition assessed.

[3] Compared to previous year



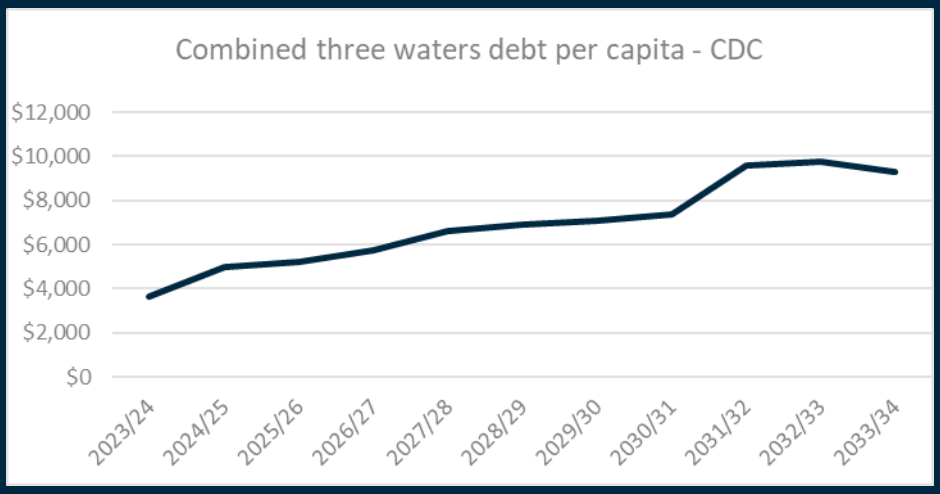
Three waters residential rates

The average three waters residential rate in CDC for 2023/24 was approximately $1,460 (including GST). Over the period of the LTP this is expected to more than triple to about $4,900 by 2034.

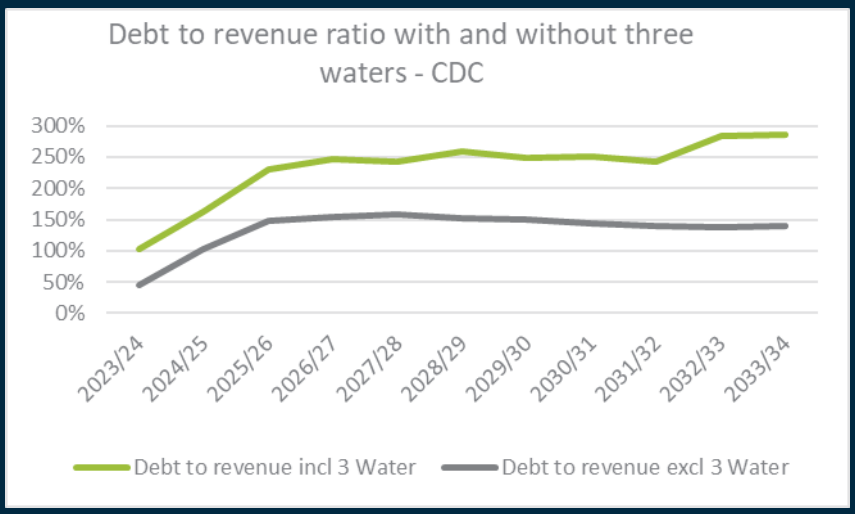
CDC separates rural and urban drinking water charges, so may not represent charges for all customer groups.

Three waters debt

Three waters debt for CDC is projected to increase from approximately $70 million in 2023/24 to a peak of $194 million by 2033/34. In per capita terms, three water debt will nearly triple from $3,660 per person to $9,300 per person.



Whole of council debt



Based on LTP projections, CDC will exceed LGFA's 280% debt to revenue lending covenant by 2032/2033. At this point it will be unable to borrow further funds without significant cost to ratepayers.

CDC's own draft Long Term Plan does not indicate that this lending limit will be breached. We note that our calculations of debt to revenue ratios rely upon data from funding impact statements and projected statements of financial position using a consistent approach across all councils. It is likely that actual calculations may differ given differences in reporting across councils.

Without three waters related debt, Council is unlikely to reach or exceed any borrowing limits within the foreseeable future.

Dunedin City Council

128,901 population (2023)

115,357 people serviced with water supplies

7 wastewater treatment plants

4 water treatment plants

1,390 km water supply pipes

385 km stormwater pipes

958 km wastewater pipes

35 water connections per kilometre

92% of people live in urban areas

$88,800 average household income (2019)

Key issues

South Dunedin flooding

Regular flooding of South Dunedin has been identified as a critical issue that needs to be resolved.

A joint programme of work is underway with Otago Regional Council to look at planning, land use and infrastructure opportunities to resolve this issue.

It is likely that infrastructural intervention will require substantial investment.

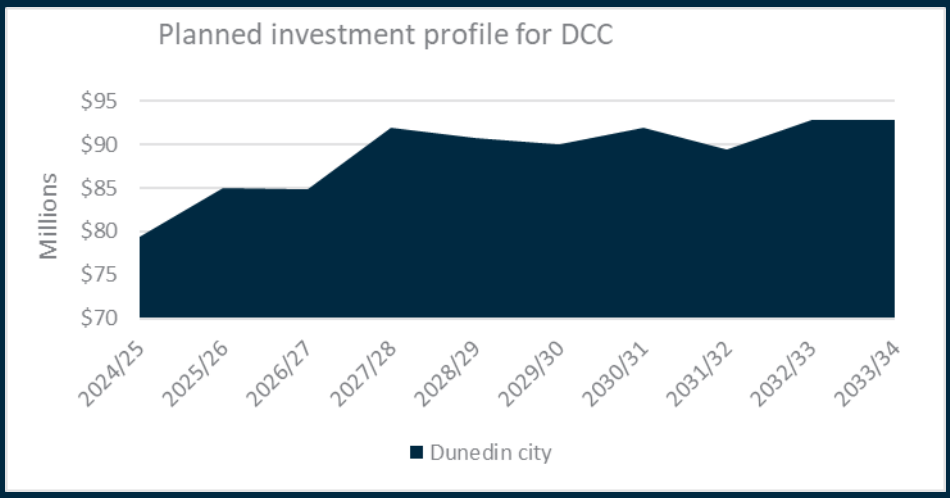
Providing for growth

Network capacity issues on parts of Dunedin's water network mean that it is unable to provide for future housing development in parts of its city.

Water take limits during dry periods also occasionally impact water supply across the network.

Ageing infrastructure

Dunedin's water, wastewater and stormwater networks are all the equal oldest in Otago and Southland.

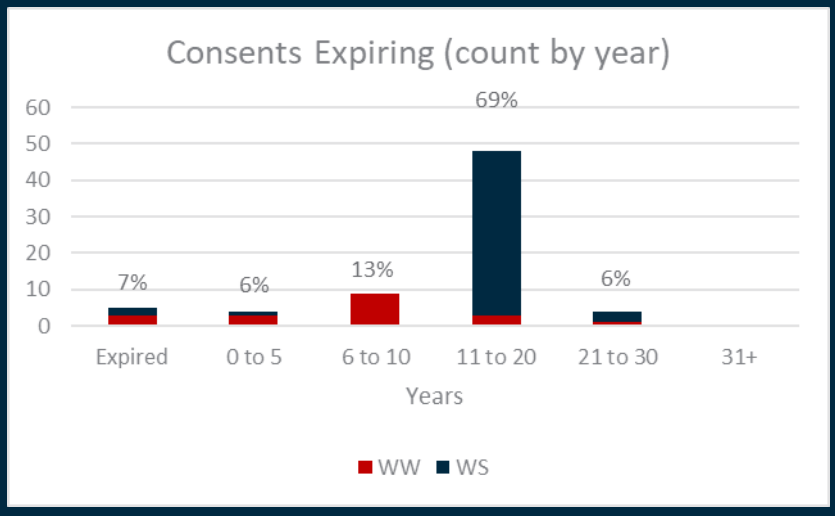


$890 million of planned investment over 10 years

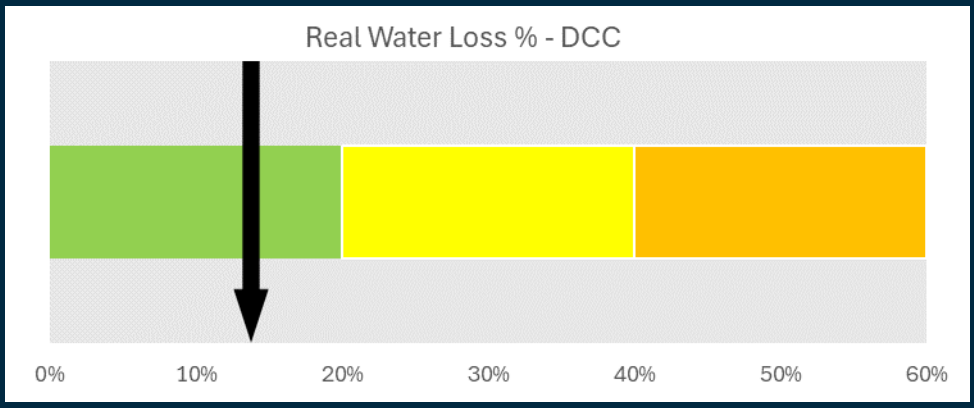
The programme is based on consistent delivery of around $90 million per year from 2028. For comparison, DCC's 2023 annual report shows it delivered $93 million in three waters capital projects during the year.

Expiring consents

The resource consents for the Green Island and Tahuna wastewater treatment plants are due to expire in 2032. Resource consents for the Waikouaiti and Middlemarch wastewater treatment plants are due to expire in 2027 and 2029 respectively.



Network performance



DCC experienced 15% real water loss in the 2023 financial year, which is amongst the lowest in the Otago and Southland councils. Water loss was 22% in 2022.

There were 3.58 dry weather overflows of the wastewater network per 1,000 connections in 2023, an increase from 2 per 1,000 connections in the previous year.

Compliance

DCC was not fully compliant with the drinking water standards in 2023. Non-compliance related to lower than required levels of free available chlorine in the Wingatui distribution zone and exceeding the maximum sampling intervals in a number of locations. Steps have been put in place to address all of these issues.

All of DCC's water supplies have bacterial and protozoal barriers and residual disinfection in place.

Taumata Arowai reports than in 2023 it received 3 notifications for MAV exceedance on the Dunedin City supply, and that the Waikouaiti supply exceeded lead MAVs on one occasion.

Area	22/23 results	22/23 Target	21/22 results	Trend[4]
Bacterial compliance	81%	100% - Not Achieved	50.5%	↑
Protozoal compliance	98.6%	100% - Not Achieved	99.6%	↓

Demand management

Dunedin experienced 3.2% growth in its population between 2022 and 2023.

Dunedin already faces some constraints on water supply. It's draft 2024 infrastructure strategy notes that constraints exist in relation to:

- Flows and pressure not always meeting requirements for firefighting purpose
- Occasional issues during summer months where raw water take needs to reduce to maintain minimum flows
- Infrastructural constraints on the volume of water able to be delivered to some parts of the city
- Expiring water take consents, particularly in the Taieri plains area which is already over-allocated

Water Consumption
280 ↑
(lpd/resident)

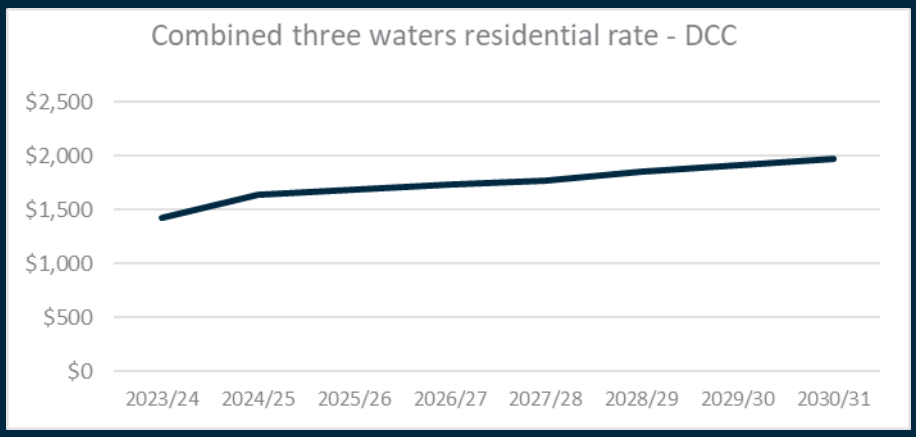
Network condition and age

A large proportion of Dunedin's three waters network is yet to have a condition assessment, however DCC's infrastructure strategy identifies that a significant proportion of its wastewater reticulation network and treated water pipelines are in poor condition.

Particular issues are noted relating to the wastewater network, which is experiencing stormwater and ground water infiltration and inundation. This also creates capacity issues in the network during high intensity rainfall events.

Service	Age (avg)	C1	C2	C3	C4	C5	Unknown
Water Supply	49	2%	4%	4%	1%	2%	87%
Wastewater	61	1%	3%	3%	1%	1%	91%
Stormwater	57	1%	1%	2%	1%	3%	92%

[4] Compared to previous year

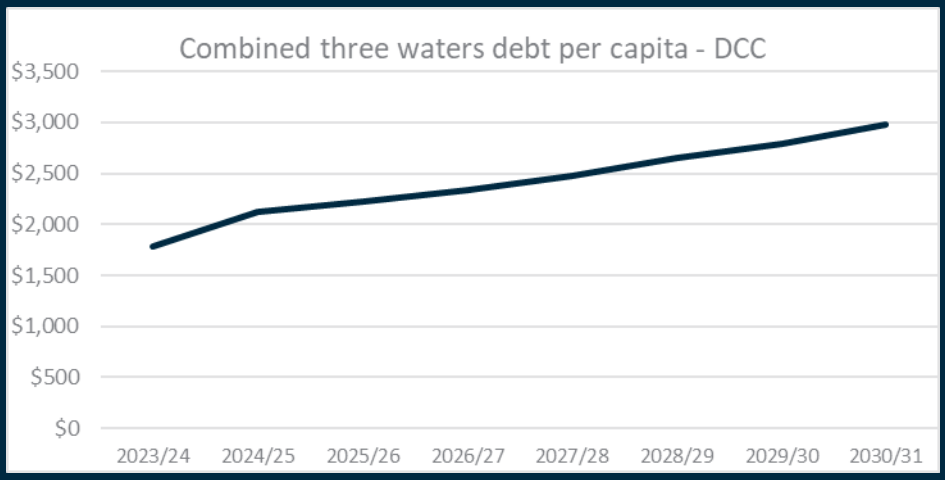


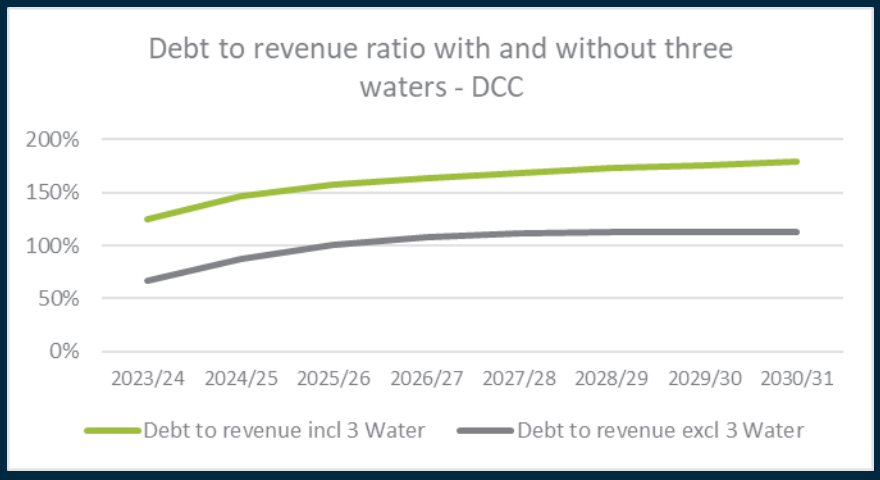
Three waters residential rates

Projections for Dunedin City Council, based on its adjusted 2021/31 Long Term Plan, see average residential three waters rates increase from $1,430 including GST in 2024 to $1,980 including GST by 2031.

Three waters debt

Dunedin's three waters net debt over the period of its adjusted 2021/31 long term plan is projected to rise from approximately $247 million in 2024 to $428 million in 2031. This translates to $2,980 per capita in 2031.





Whole of council debt

Dunedin's 2021 Long Term Plan projects total debt to reach 180% of revenue by 2031.

An increased capital works programme and borrowing requirements identified as part of the 2024 long term plan preparation would likely have resulted in further increases to debt to revenue ratios. Our projections do not anticipate Dunedin breaching its 280% borrowing limits based on increased three waters capital expenditure alone.

Notably, DCC's debt to revenue ratio is expected to improve if three waters revenue and debt were to be transferred. However, the upward trend of borrowings excluding three waters, indicates that at the time of the 2021 LTP, three waters investment needs were not significantly constraining planned investment in other council activities.

Gore District Council

12,711 population (2023)

9,290 people serviced with water supplies

3 wastewater treatment plants

3 water treatment plants

126 km water supply pipes

62 km stormwater pipes

108 km wastewater pipes

10 water connections per kilometre

76% of people live in urban areas

$96,800 average household income (2019)

Key issues

Separation of wastewater & stormwater

Approximately 40 % of Gore and 25 % of Mataura's wastewater and stormwater networks are combined.

A study completed in 2018 estimated that it would cost $175 million to achieve full separation of the Gore network.

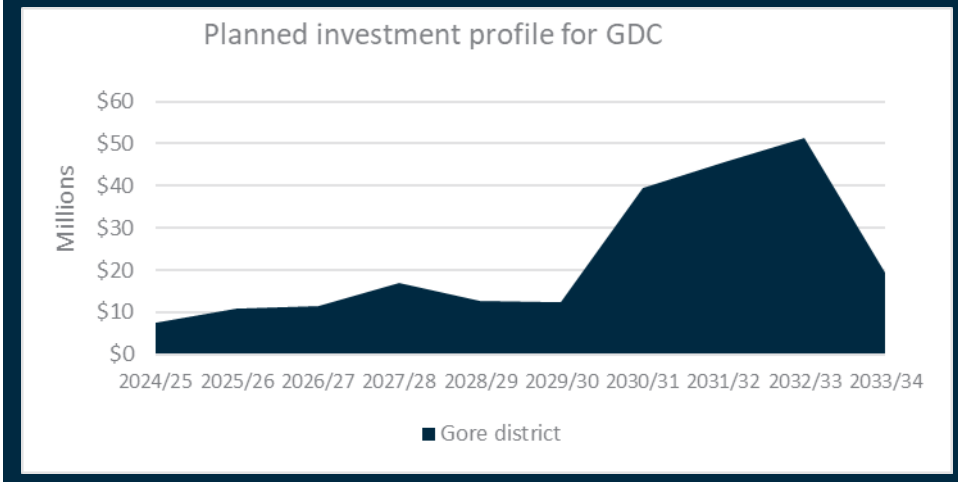
Water loss

Approximately 38% of Gore's water and 56 % of Mataura water is lost through leakage.

Given limitations on water takes from Gore's surface water supplies during dry periods, a reduction in leakage would reduce the need for water restrictions.

Debt constraints

GDC's current debt projections see it breaching both the LGFA lending covenants for credit rated, and unrated, councils. With the significant majority of this borrowing relating to three waters, investment in three waters infrastructure will be constrained without additional rates rises to support further lending.

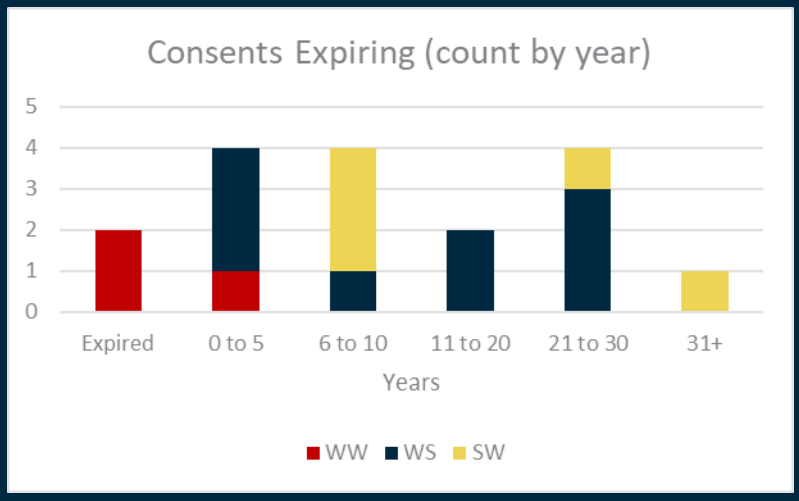


$227 million of planned investment over 10 years

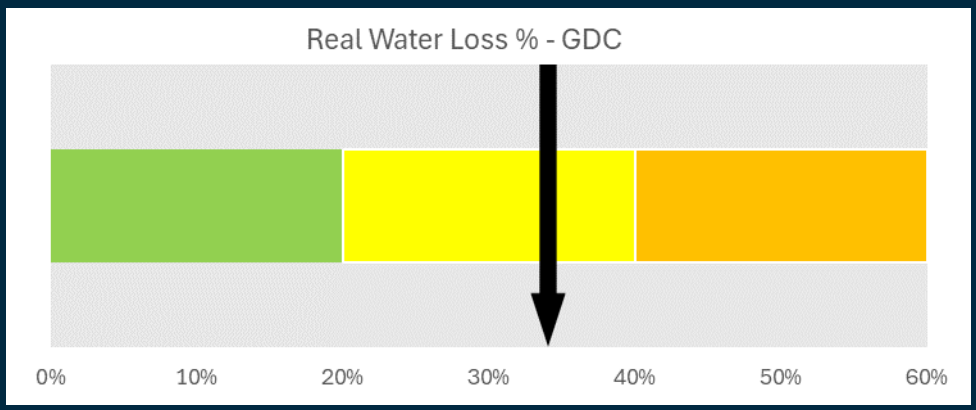
The programme is back loaded, peaking at $51 million in 2033. For context, GDC's entire planned capital works programme (for all activities) in 2024 equalled only $11 million

Expiring consents

GDC is currently in the process of applying to renew its expired discharge consents for the Gore and Mataura Wastewater Treatment Plants. Significant upgrades to improve the performance and minimise cultural impacts are expected as part of this consent renewal process.



Network performance



Approximately 38% of Gore's water and 56 % of Mataura water is lost through leakage. Investigations have not been able to identify the source of this leakage.

Managing water loss on the network would reduce the frequency of water restrictions being required in summer.

GDC's wastewater network met its target levels of service in 2023, with no dry weather overflows being reporting in its annual report.

Compliance

Gore reported that it was not compliant with protozoal and bacterial criteria in the drinking water quality assurance rules in 2023. Non-compliance related to the Mataura and Hilbre Ave water treatment plants. The Hilbre Ave water treatment plant is due to be decommissioned once a pipeline has been installed to enable raw water from that plant to be treated at the East Gore water treatment plant.

A temporary consumer advisory notice was in place for the Gore water supply for 2 days in 2023.

Area	22/23 results	22/23 Target
Bacterial compliance	Non-compliant	100%
Protozoal compliance	Non-compliant	100%

GDC had no abatement notices, infringement notices, or enforcement orders on its wastewater network in 2023 or 2022.

Demand management

GDC district is not expected to experience significant population growth in the near future, with population estimates indicating a small reduction in the population of the Gore district by 2043. Water consumption, at 452 litres per resident per day, is the third lowest in the two regions.

Water Consumption
452 ↓
(lpd/resident)

The district currently experiences periods where surface water takes for the Gore water supply need to be supplemented from a second water source. Increased frequency of extreme weather events and changing resource consent conditions may increase the need for this in the future.

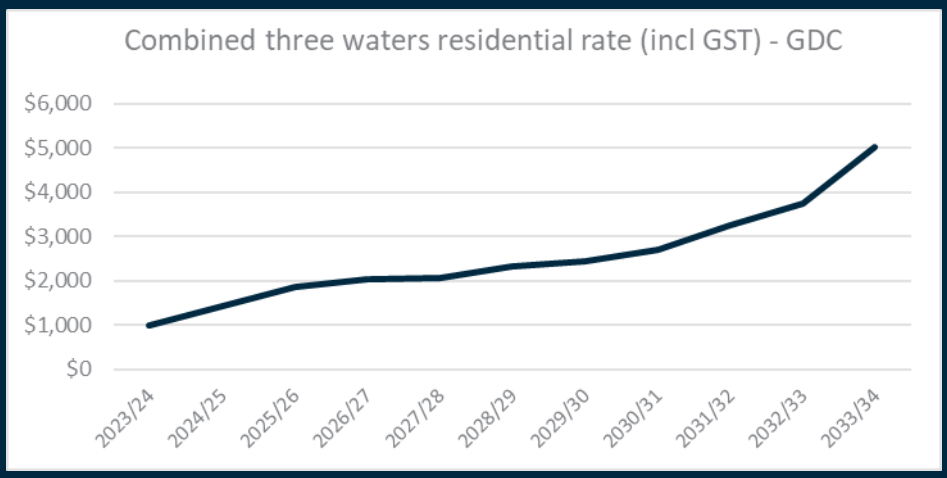
Increased frequency of intense rainfall events may exacerbate existing capacity issues on the wastewater network, which are primarily the result of the large portion (40% in Gore) of combined wastewater and stormwater network.

Network condition and age

GCC's assets are the third oldest across the two regions, with 21% of its water network having a predicted renewal date prior to 2030. Over 70km of water reticulation assets are predicated to require renewal in the 2030s, including the majority of its asbestos cement pipes.

Service	Age (avg)	C1	C2	C3	C4	C5	Unknown
Water Supply	45	18%	0%	0%	0%	0%	82%
Wastewater	52	10%	0%	3%	0%	1%	86%
Stormwater	43	17%	1%	0%	0%	0%	82%

A significant portion of the assets have yet to be condition assessed, this is a risk to Council. A condition assessment carried out in 2022 identified that over 60% of earthenware wastewater pipes were assessed as being in poor or very poor condition. Earthenware represents a significant proportion of the network.

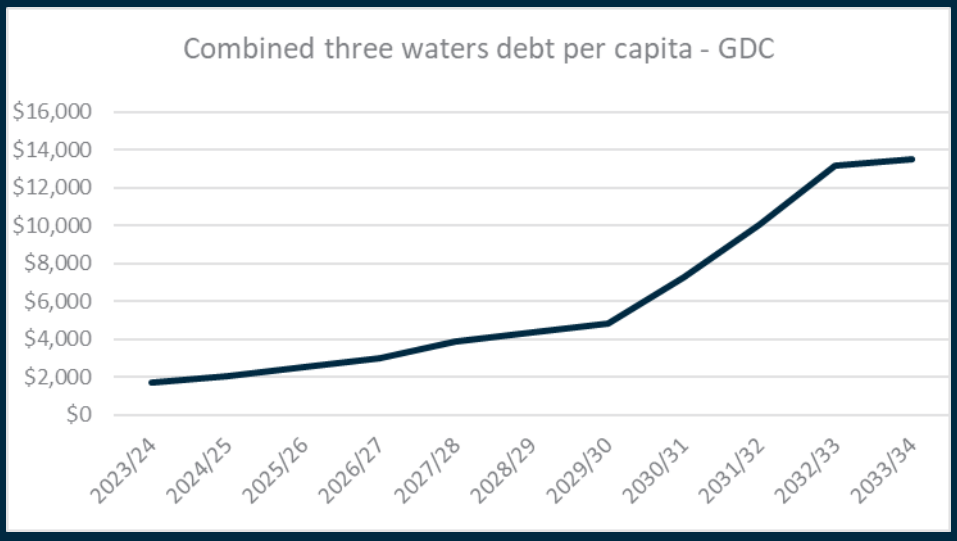


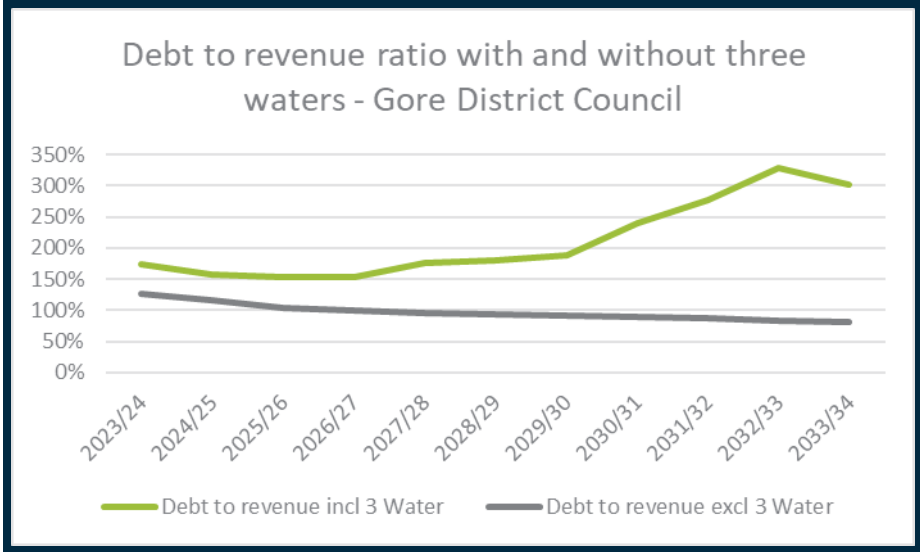
Three waters residential rates

The average three waters residential rate in GDC for 2023/24 was approximately $990 (including GST). Based on draft 2024 Long Term Plan financials that were prepared prior to Council opting to defer it's long term plan, this was expected to increase five-fold to $5,000 by 2034

Three waters debt

Three waters debt for Gore District Council is projected to increase from approximately $22 million in 2023/24 to over $180 million by 2033/34 according to early drafts of its now deferred 2024 long term plan. In per capita terms, three water debt will increase nearly six-fold from $1,750 per person to over $13,500 per person.





Whole of council debt

Gore District Council is projected to exceed its 175% borrowing limit for unrated councils until 2027/28 at which point it would need to obtain a credit rating to access further borrowing capacity. LGFA's 280% debt to revenue ratio is currently also projected to be exceeded in 2032/33 at which point GDC would need to increase revenue to fund further investment.

The removal of three waters sees Gore's debt steadily reduce over time, and for borrowing to remain well within the 175% limit.

Invercargill City Council

55,599 population (2023)

50,456 people serviced with water supplies

2 wastewater treatment plants

1 water treatment plant

422 km water supply pipes

417 km stormwater pipes

376 km wastewater pipes

52 connections per kilometre

91% of people live in urban areas

$98,000 average household income (2019)

Key issues

Expiring consents

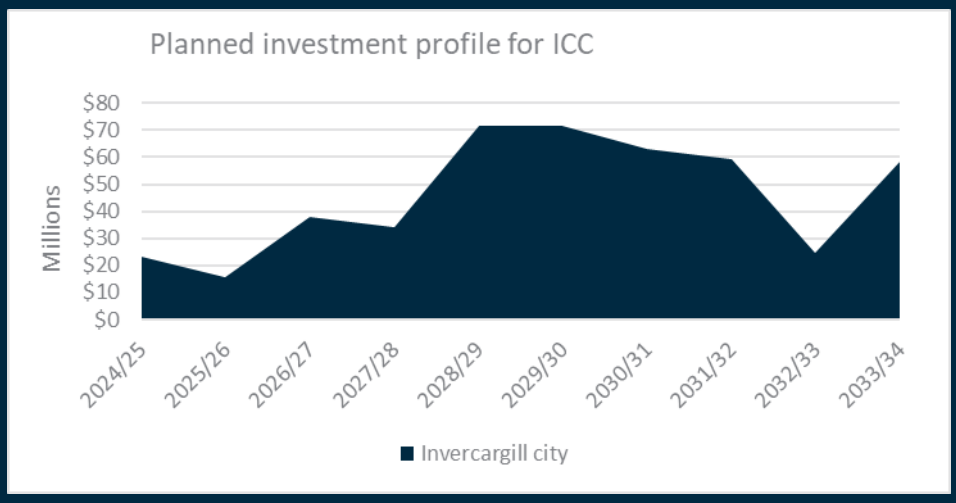
Expiring resource consents for wastewater treatment plants in Bluff and Clifton are estimated to cost a combined $111 million which is included in ICC's LTP. Any future requirement to discharge to land would incur further costs. Price estimates range from $5 – 27 million for Bluff and $40 – 200 million for Clifton

Water source resilience

ICC is currently dependent on a single water source, an additional source is required to provide water security and resilience. Development of an additional water source has been identified as a strategic priority and there is $60 million in ICC's LTP for this project

Ageing infrastructure

ICC's three waters infrastructure has the equal oldest average age across the group

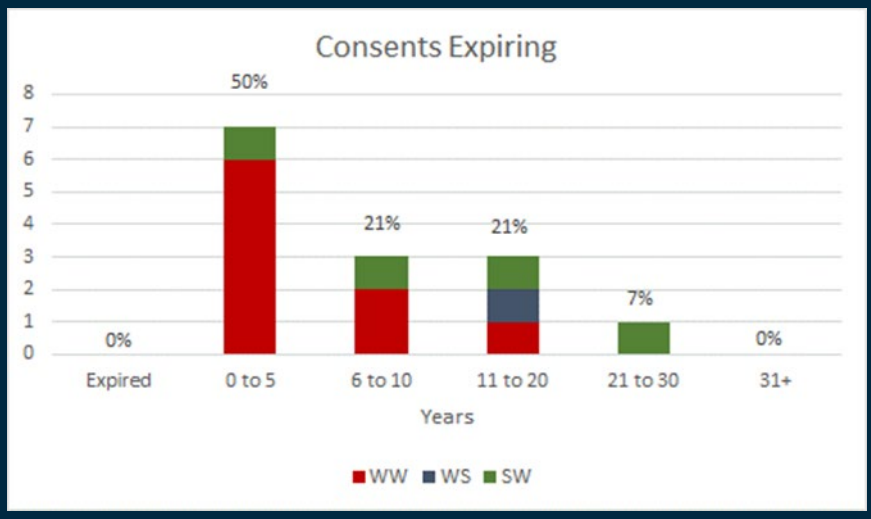


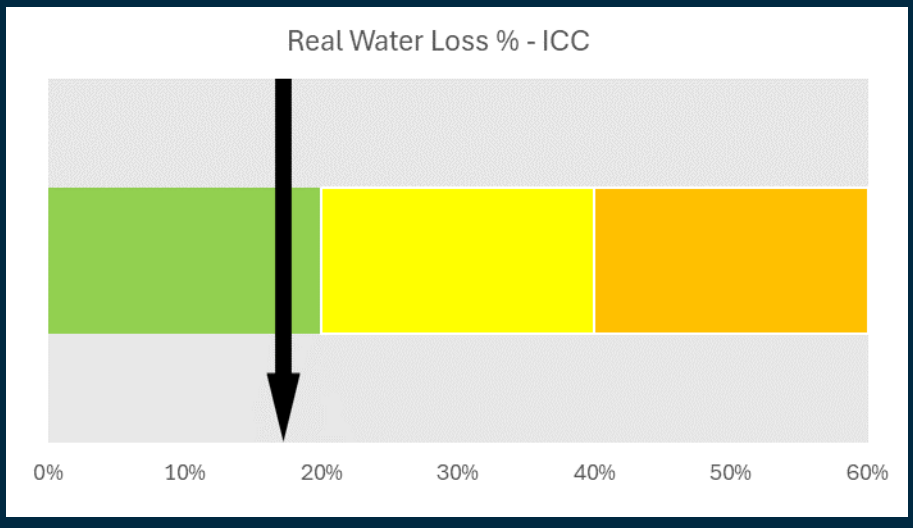
$460 million of planned investment over 10 years

ICC's three waters capital works programme peaks at $71 million per year in 2029; that's 50% larger than its entire capital works programme in 2024

Expiring consents

ICC has six wastewater consents that are due to expire in the next 5 years, with a further two due to expire in the following 5 years. These consents relate to its wastewater treatment plants in Clifton and Bluff, and $111 million has been provided for within its LTP for the upgrades to support these consent renewals.





Network performance

ICC experienced an estimated 18.5% real water loss in the 2023 financial year, which is in the lower half of councils in the Otago and Southland regions. Water loss in 2022 was reported as being 9.7%.

There were 1.37 dry weather overflows of the wastewater network per 1,000 connections in 2023

Compliance

ICC reports full compliance with the drinking water standards in its 2023 annual report and is not reported to have any Maximum Acceptable Value (MAV) exceedances or consumer advisory notices during the year.

Area	22/23 results	22/23 Target	21/22 results	Trend[5]
Bacterial compliance	100%	100% - Not Achieved	100%	↔
Protozoal compliance	100%	100% Not Achieved	100%	↔

ICC has been compliant with all of its wastewater consents, reporting no consent breaches in the last two years.

Demand management

ICC has planned to install water meters across its network and has set aside $10.8 million in its LTP to do this. ICC already reports the lowest average water consumption per resident out of all councils in the Otago and Southland regions.

Demand projections for ICC's water supply, show ICC is likely to remain within its consented water take limits for the foreseeable future, with or without the aluminium smelter at Tiwai point remaining open

Water Consumption
231 ↓
(lpd/resident)

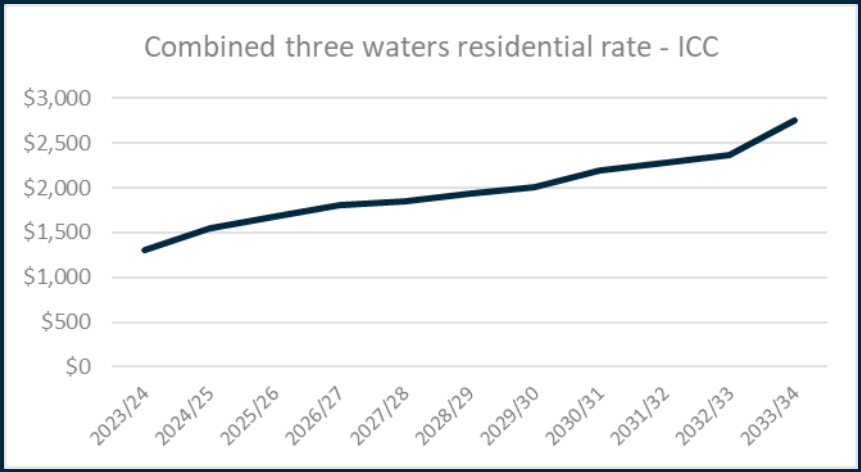
Network condition and age

ICC's water, wastewater and stormwater infrastructure each have the equal highest average age of all of the councils in the Otago and Southland regions.

Service	Age (avg)	C1	C2	C3	C4	C5	Unknown
Water Supply	49	16%	27%	18%	21%	18%	0%
Wastewater	61	21%	11%	44%	16%	8%	0%
Stormwater	58	18%	13%	37%	24%	8%	4%

39% of ICC's water network has been identified as being in poor or very poor condition, while 24% of wastewater assets and 32% of stormwater assets fell into the same categories. ICC's asset management plan notes a low level of confidence in the asset condition data as many of the assets sampled had known issues.

[5] Compared to previous year

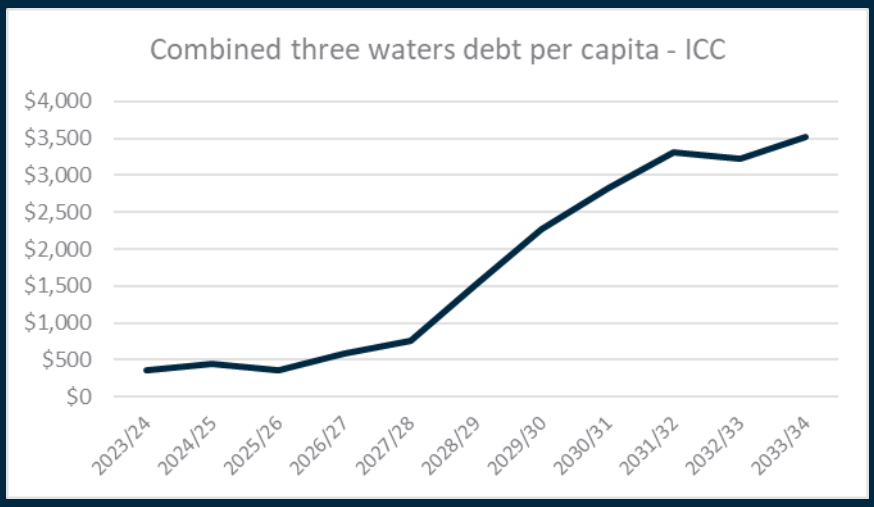


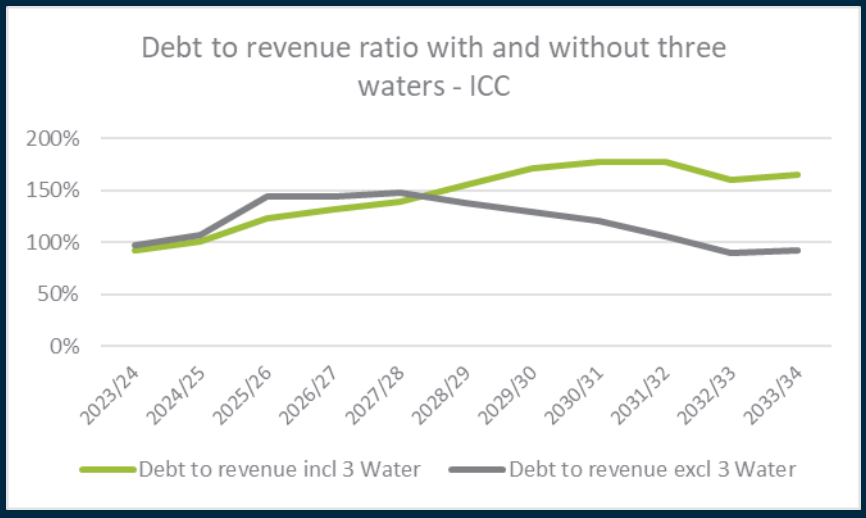
Three waters residential rates

Average residential rates (including GST) for three waters are expected to increase by 110% from approximately $1,300 in 2024 to over $2,750 by 2034.

Three waters debt

Net three waters debt is projected to increase from approximately $20 million in 2024 to over $220 million by 2034, or from $358 per head of population to over $3,500 per capita.





Whole of council debt

Council's total debt to revenue ratio is forecast to peak at 178% in 2031/32, and it is unlikely to exceed LGFA lending limits.

In the short term, without three waters debt and revenue, ICC will have reduced borrowing capacity (though still within LGFA lending limits).

Longer term, ICC will have an improvement in its total borrowing capacity if three waters debt and revenue was transferred.

Queenstown Lakes District Council

47,808 population (2023)

96,471 people serviced with water supplies

14 wastewater treatment plants

14 water treatment plants

642 km water supply pipes

465 km stormwater pipes

516 km wastewater pipes

51 water connections per kilometre

88% of people live in urban areas

$110,600 average household income (2019)

Key issues

High level of growth

QLDC continues to experience significant levels of population growth.

Providing infrastructure to support that growth is expensive, $721 million of investment has been identified as being needed in the next ten years.

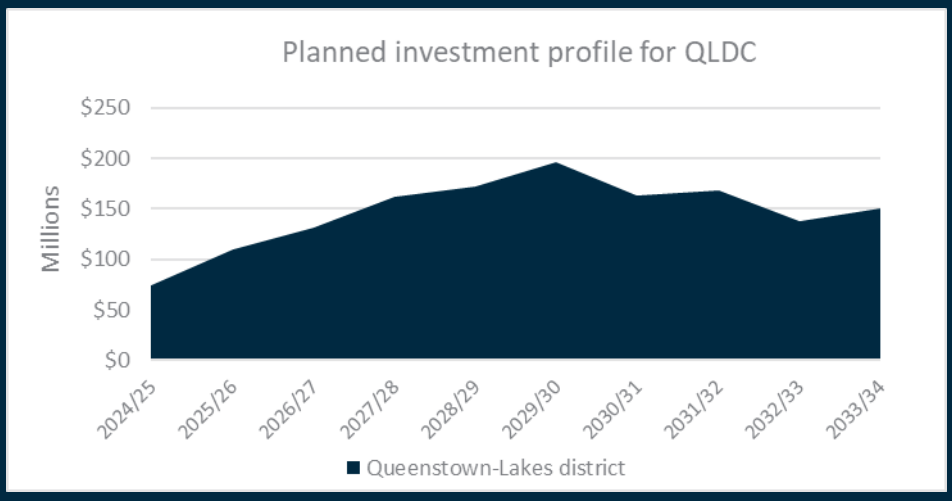
Borrowing capacity

QLDC's LTP projects an average debt to revenue ratio over the ten year period of 260%. The costs of serving this debt and funding depreciation account for half of the 15.6% rates rise proposed for the 2024/25 financial year.

Debt limits leave very little borrowing headroom.

Servicing tourism demand

QLDC's economy is dependent on its high levels of tourism. While tourism supports business in the district, the high peak tourist population means QLDC's three waters infrastructure needs to support a population that is almost double its resident population.

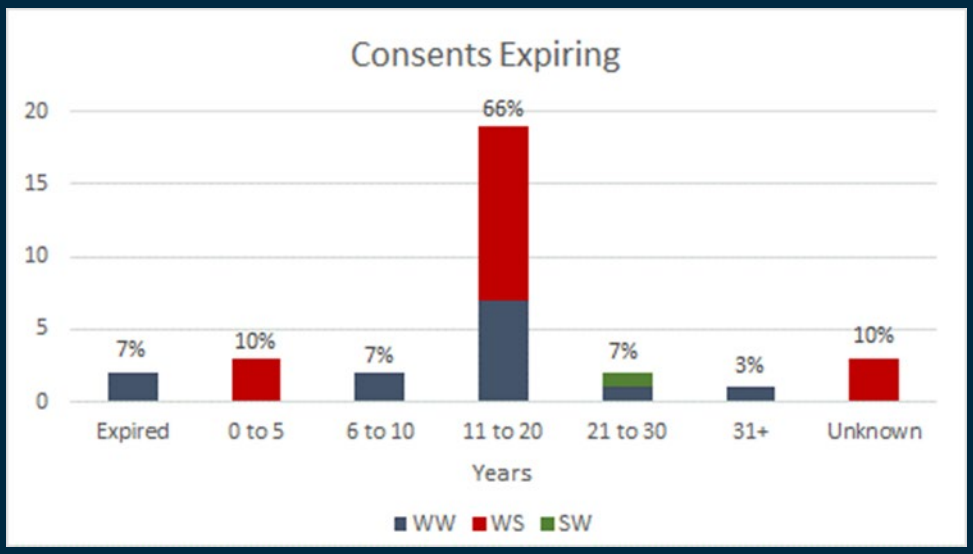


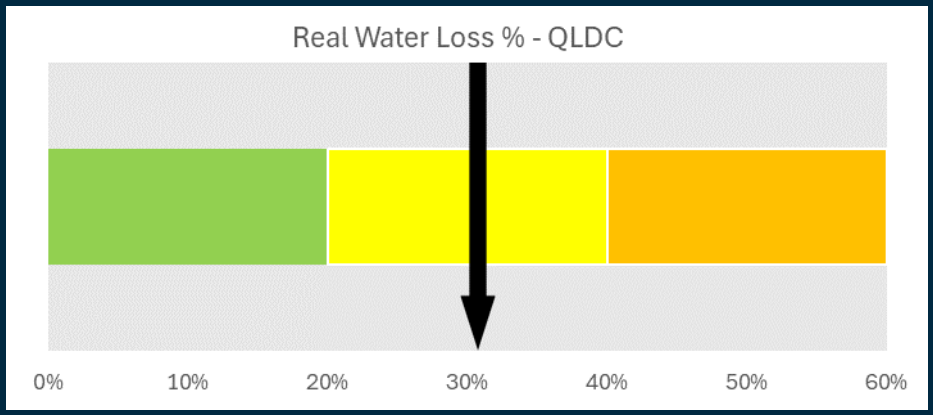
$1.5 billion of planned investment over 10 years

QLDC's three waters capital works programme peaks at $196 million per year in 2029, for context QLDC's entire capital works programme in 2024 total $202 million.

Expiring consents

QLDC has a steady rate of consents expiring until the 11 to 20 year period where 66% of its consents are due to expire.





Network performance

QLDC experienced an estimated 32% real water loss in the 2023 financial year, which is in the top half of councils in the Otago and Southland regions and high for a young network age.

There were 2.03 dry weather overflows of the wastewater network per 1,000 connections in 2023

Compliance

Queenstown has 10 registered drinking water schemes. Of these, six have all barriers in place, and four do not have protozoal barriers. All ten schemes have residual disinfection in place.

Area	22/23 results	22/23 Target	21/22 results	Trend[6]
Bacterial compliance	55%	100% - Not Achieved	100%	↓
Protozoal compliance	40%	>50% Not Achieved	11%	↑

QLDC reported 85% compliance with its resource consents in 2023 (the same as the previous year). There were two abatement notices for two wastewater treatment plants in the district in 2023.

Demand management

Demand management and servicing growth are the biggest issues facing QLDC. It's long term plan sets aside half of its three waters capital works programme, or $721 million over the next ten years to support growth.

Water Consumption
508 ↑
(lpd/resident)

QLDCs three waters asset management plan notes that the district is already facing regular water restriction during peak periods and is struggling to meet consumer demand in some areas.

QLDC's 2022/23 water consumption rate is among the highest in the Otago and Southland regions and the consumption trend has worsened compared to the previous year.

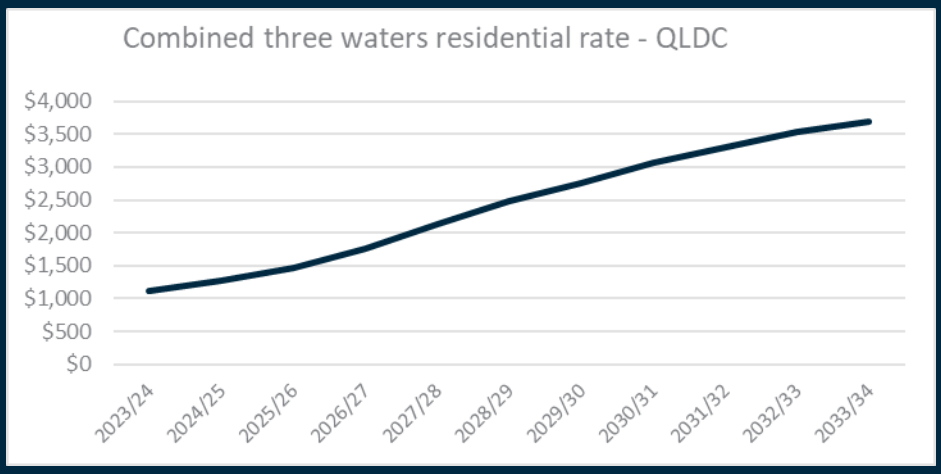
Network condition and age

QLDC's water, wastewater and stormwater infrastructure all have the lowest average age of all of the councils in the Otago and Southland regions.

Service	Age (avg)	C1	C2	C3	C4	C5	Unknown
Water Supply	19	58%	14%	11%	9%	1%	7%
Wastewater	22	53%	13%	10%	12%	5%	7%
Stormwater	25	58%	15%	11%	4%	8%	4%

QLDC notes that the condition of its three waters infrastructure is very good, with over 70% of its water supply and stormwater assets rated as good or very good. 66% of QLDC's wastewater network is also in good or very good condition.

[6] Compared to previous year

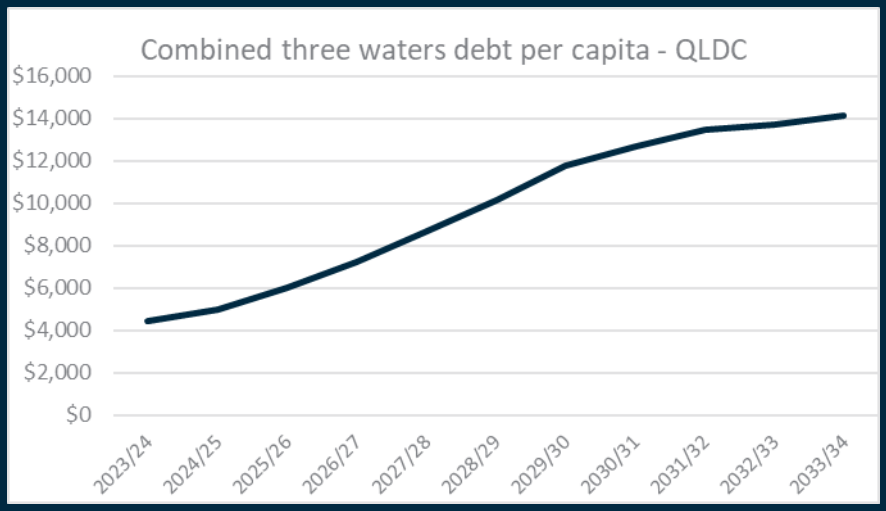


Three waters residential rates

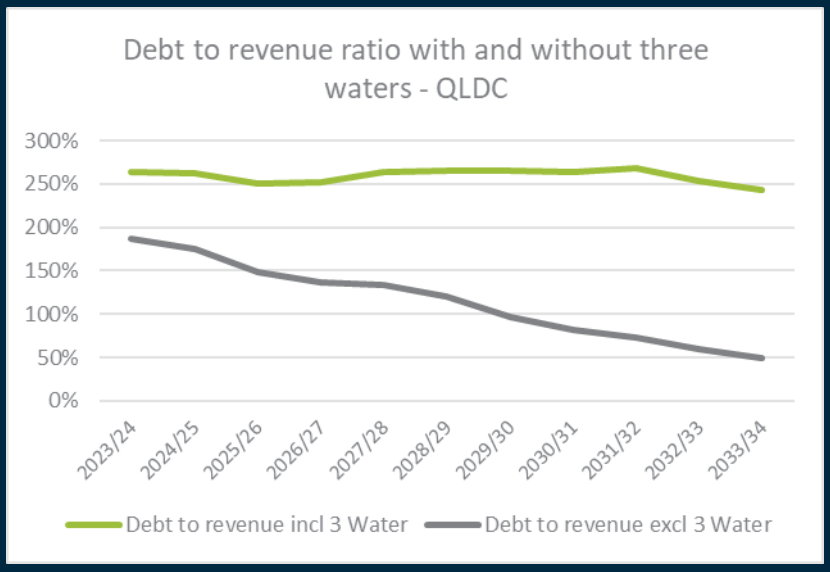
The average three waters residential rate in QLDC for 2023/24 was approximately $1,100 (including GST). Over the 10 years covered in QLDC's LTP the three waters rate is expected to increase by 230% to almost $3,700 in 2034.

Three waters debt

Three waters debt for QLDC is projected to increase from approximately $240 million in 2023/24 to over $1 billion by 2033/34 according to its 2024 long term plan. In per capita terms, three waters debt will triple from $4,470 per person to over $14,167 per person.



Whole of council debt



Based on LTP projections, QLDC is projected to remain very closely within its 280% borrowing limit through the period of its LTP. While projected debt levels do not exceed borrowing limits, QLDC will retain very little borrowing headroom.

The removal of three waters sees Queenstown's debt reduce steadily during the LTP period. This indicates that investment in community infrastructure outside of three waters has been constrained during the LTP period due to the need to invest in three waters. 60% of Queenstown's capital works programme relates to three waters services, while only 33% of its operating revenue (excluding development contributions) is from three waters charges.

Southland District Council

31,833 population (2023)

11,403 people serviced with water supplies

19 wastewater treatment plants

12 water treatment plant

681 km water supply pipes

112 km stormwater pipes

246 km wastewater pipes

13 water connections per kilometre

22% of people live in urban areas

$112,000 average household income (2019)

Key issues

Small communities

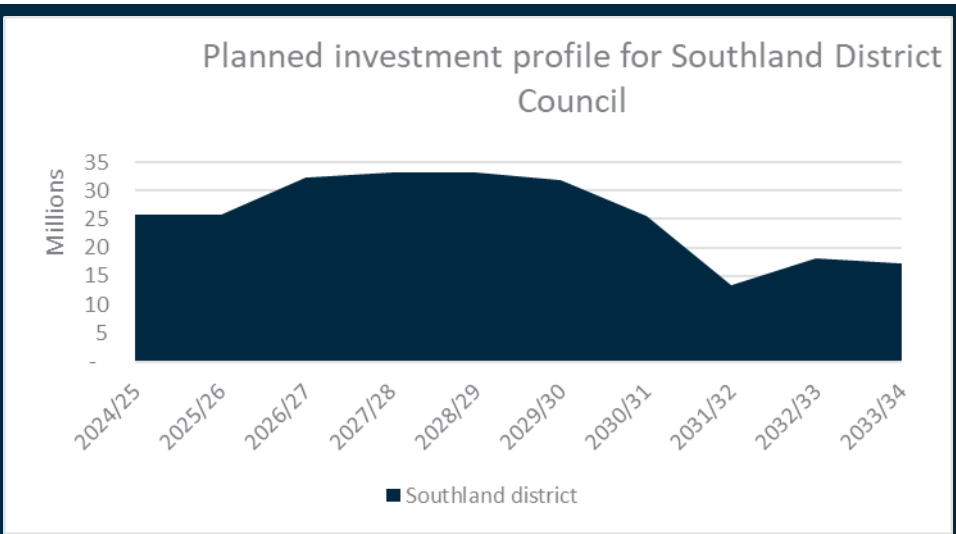
SDC provides reticulated drinking water to 12 communities within its district, and reticulated wastewater to 19 communities. Only two of these communities have populations over 1,000 people and opportunities to connect schemes are very limited.

Expiring consents

Half of SDC's existing resource consents across its three waters activities are expiring within 10 years, including 13 consents relating to wastewater treatment

Affordability

Average residential rates for three waters are expected to more than double from approximately $1,465 in 2024 to over $4,310 by 2034.



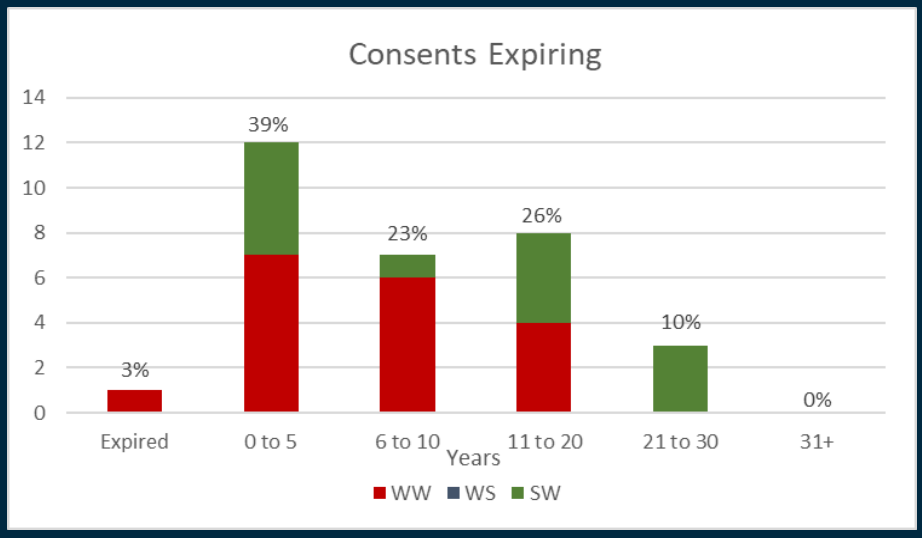
$256 million of planned investment over 10 years

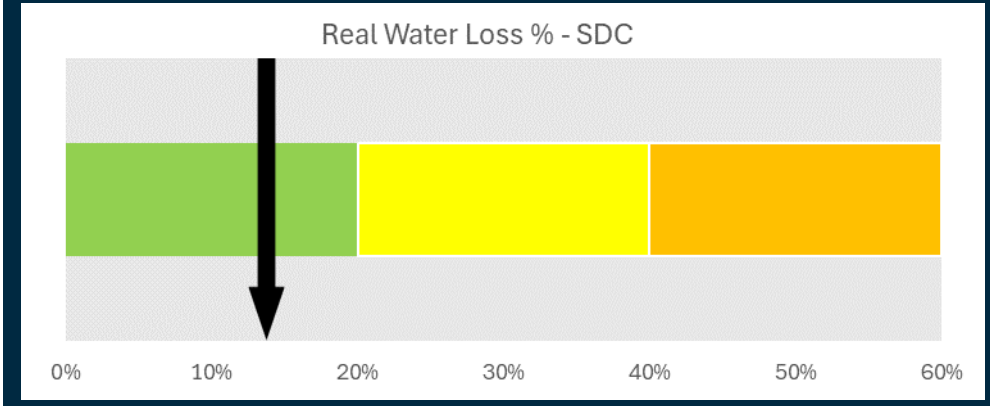
SDC's three waters capital works programme peaks at $33 million per year in 2028, for comparison its three waters capital works programme in 2024 was $12.5 million.

Expiring consents

SDC has 13 wastewater consents that are due to expire in the next 10 years. Treatment plant upgrade and consent renewals are planned for Balfour, Winton, Gorge Road, Manapouri, Nightcaps and Ohai, totalling around $37 million.

Recent announcements regarding standardised design for wastewater treatment plants with populations of fewer than 1,000 people may reduce future investment requirements for some of these plants.





Network performance

SDC experienced some of the lowest rates of estimated water loss in the Otago and Southland regions, with 15% water loss across its water supply schemes in the 2023 this was down from 16% in 2022.

There were no dry weather overflows of the wastewater network reported in 2023.

Compliance

SDC has 12 drinking water schemes registered with Taumata Arowia. All 12 schemes have bacterial and protozoal barriers and residual disinfection in place other than the Eastern Bush/Otahu Flats RWS scheme which does not have a protozoal barrier in place.

SDC had one long term consumer advisory notice in place on its Tuatapere scheme for 198 days in 2023.

Area	22/23 results	22/23 Target	21/22 results	Trend[7]
Bacterial compliance	96%	100% - Not Achieved	91%	↑
Protozoal compliance	18%	100% Not Achieved	36%	↓

SDC reported that in 2022/23 there were 15 incidents where resource consents for wastewater were breached.

Demand management

SDC does not anticipate any significant growth in demand across the district.

Given the limited expected growth it is not anticipated that a specific programme will be required to manage people related growth. SDC intends to undertake further work in the upcoming three years to more fully understand the impact of climate change related demand.

Water Consumption
583 ↓
(lpd/resident)

SDC notes that it has existing capacity issues on its stormwater network, and that future efforts to separate its wastewater and stormwater networks in those areas may overwhelm the existing stormwater infrastructure.

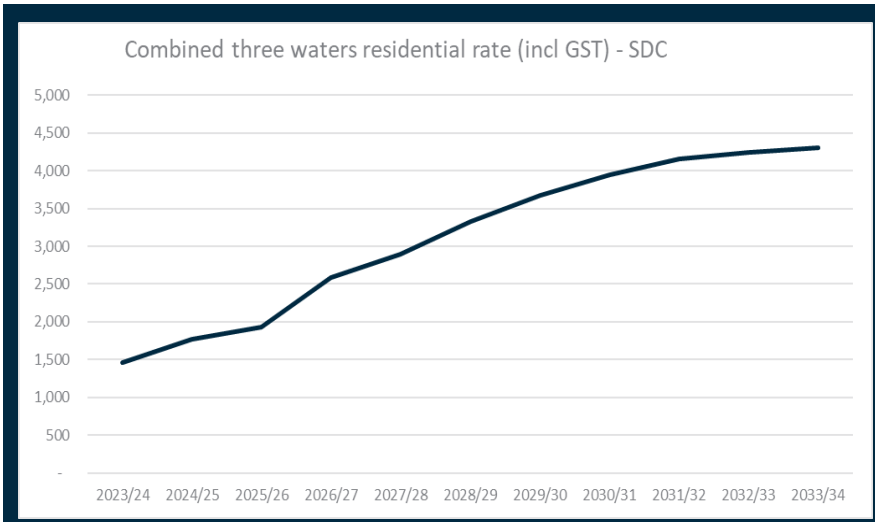
Network condition and age

The age of SDC's 3 waters assets are all in line with the Southland/Otago region average, except its wastewater which is younger.

Service	Age (avg)	C1	C2	C3	C4	C5	Unknown
Water Supply	39	19%	5%	65%	6%	5%	0%
Wastewater	30	10%	20%	40%	20%	10%	0%
Stormwater	49	17%	16%	24%	30%	9%	4%

A high proportion of SDC's wastewater and stormwater assets are in poor or very poor condition, while the majority of its water infrastructure is in an average condition.

[7] Compared to previous year

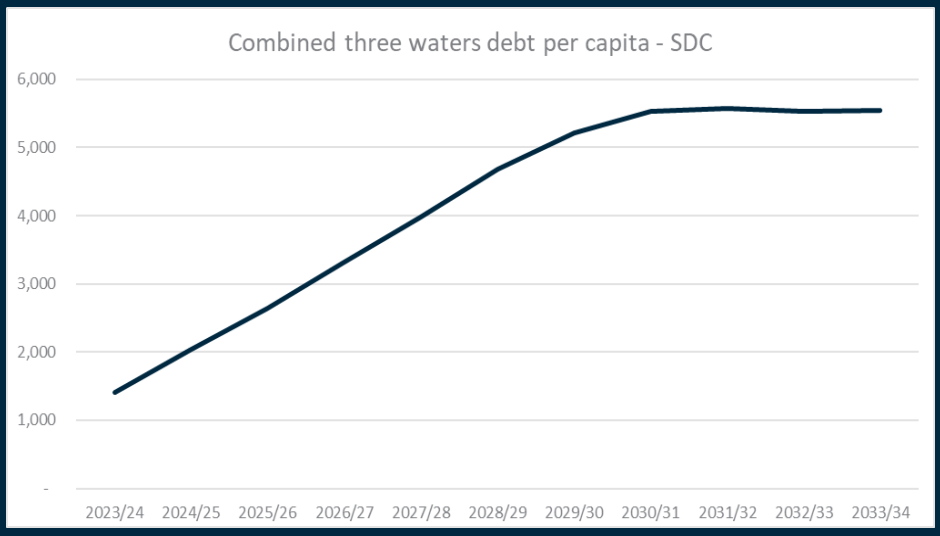


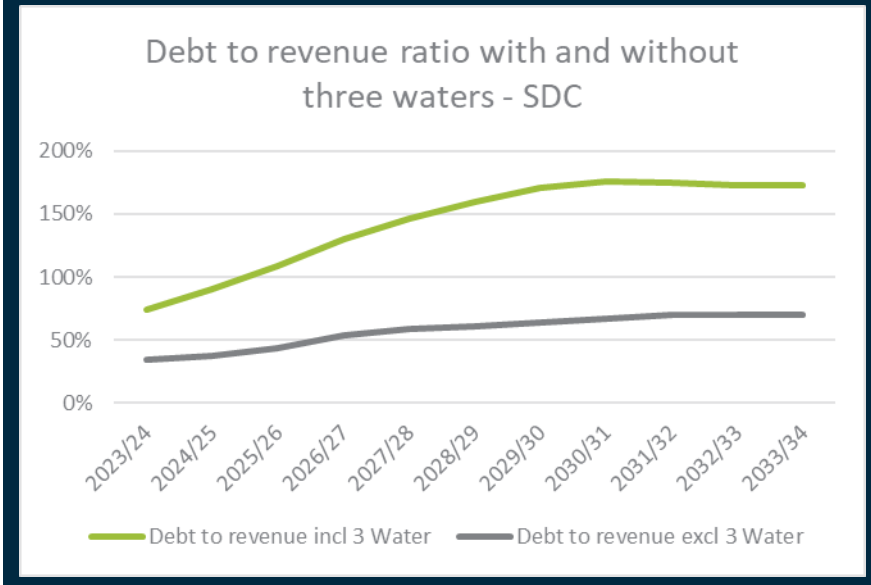
Three waters residential rates

Average residential rates (including GST) for three waters are expected to more than double from approximately $1,465 in 2024 to over $4,310 by 2034.

Three waters debt

Net three waters debt is projected to increase from approximately $46 million in 2024 to almost $200 million by 2034, or from $1,410 per head of population to over $5,540 per capita.





Whole of council debt

SDC does not currently hold a credit rating and therefore has a borrowing limit from LGFA of 175%.

Based on LTP projections, this will be close to being exceeded in 2031. Borrowing capacity will be heavily constrained without a credit rating.

Removal of three waters debt and revenue would ensure SDC stays well within LGFA lending limits.

Waitaki District Council

23,472 population (2023)

20,202 people serviced with water supplies

8 wastewater treatment plants

15 water treatment plants

1,766 km water supply pipes

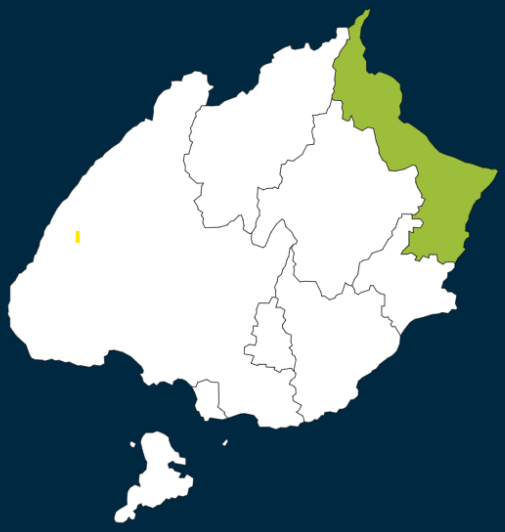
57 km stormwater pipes

201 km wastewater pipes

7 water connections per kilometre

45% of people live in urban areas

$82,200 average household income (2019)



Key issues

Small communities

WDC provides drinking water and wastewater services to a number of small schemes. 13 of its 15 drinking water schemes serve a population under 1,000. Every water and wastewater scheme in WDC has their own targeted rate, meaning large variations in the rates paid to receive water and wastewater services.

Compliance

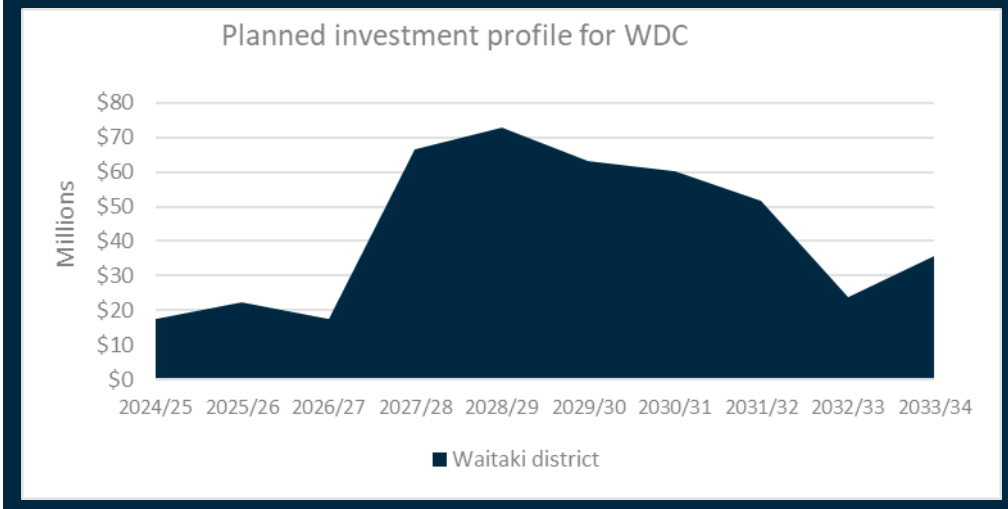
Delivering drinking water that is compliant with drinking water standards has been challenging in a number of small and rural schemes in particular.

Over half of WDC's water schemes were under long term consumer advisory in 2023, with an estimated 1,478 people affected.

Water loss

WDC experiences the highest rates of water loss across the Otago and Southland regions, with an estimated loss as high as 60% in Kurow.

Water loss can be difficult to detect due to the high prevalence of free draining soil meaning loss is not often evident on the surface.

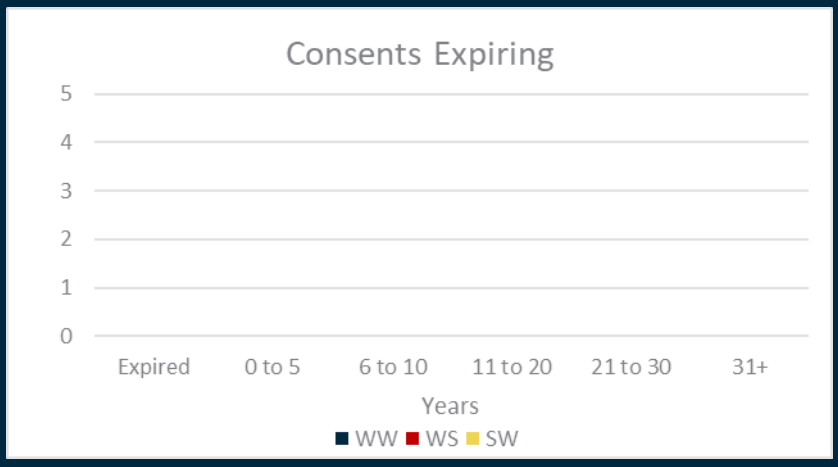


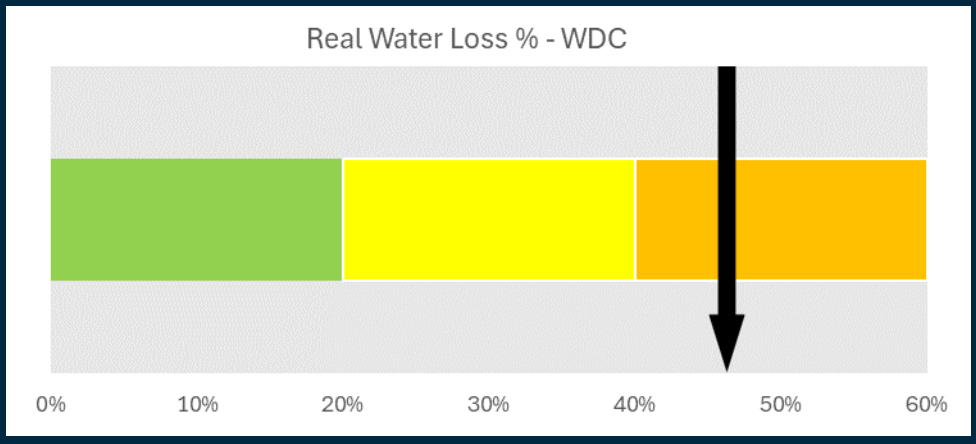
$430 million of planned investment over 10 years

WDC's three waters capital works programme peaks at $72 million per year in 2029, for context WDC's entire capital works programme in 2024 totalled $84 million.

Expiring consents

We have not been provided with consent expiry data for WDC. However, WDC's capital works programme includes consent related upgrades for Duntroon, Kurow, Lake Ohau, and Oamaru wastewater treatment plants. Total estimated capital expenditure for these upgrades total $89 million.





Network performance

WDC experienced between 35% - 60% water loss across its water supply schemes in the 2023 financial year. This is the largest rate of lost water across the Otago and Southland regions.

There were 1.3 dry weather overflows of the wastewater network per 1,000 connections in 2023

Compliance

WDC reported only 25% compliance with the drinking water standards in its 2023 annual report. Eight of its 15 registered water supply schemes were under long term consumer advisory notice during 2023. Combined, these schemes service a population of 1,478.

Area	22/23 results	22/23 Target	21/22 results	Trend[8]
Bacterial compliance	25%	100% - Not Achieved	67%	↓
Protozoal compliance	25%	100% Not Achieved	50%	↓

WDC received two infringement notices in 2023 for its wastewater consents, these related to abatement notices received in 2022.

Demand management

WDC has high levels of water loss and the third highest level of water consumption per resident across the Otago and Southland regions.

WDC is only expected to experience modest growth over the next ten years. Controlling water loss and demand management should ensure that infrastructure and existing water consents are able to manage future demand for three waters services.

Water Consumption
524 ↑
(lpd/resident)

Funding has been set aside to undertake wastewater treatment plant capacity studies for the Oamaru and Kurow wastewater treatment plant and the Oamaru stormwater network over the next five years. This should provide additional data to confirm whether capacity upgrades are required in the future.

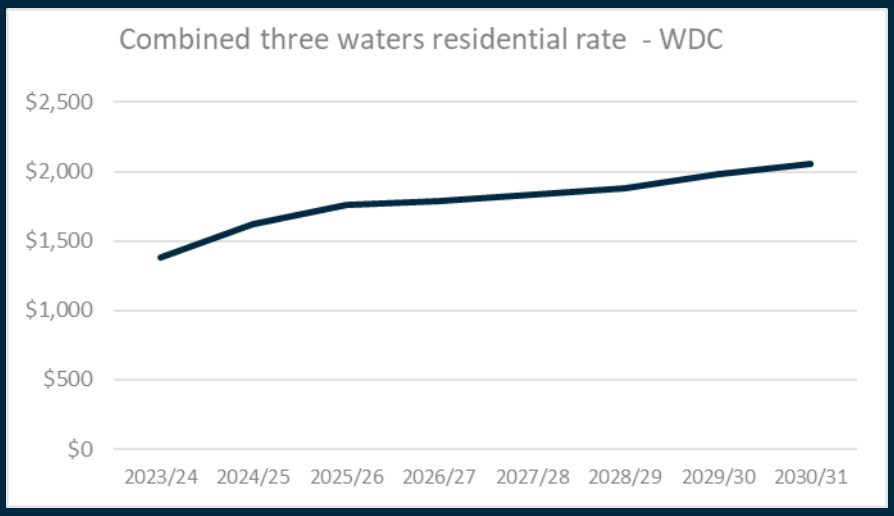
Network condition and age

WDC's wastewater and stormwater infrastructure have average ages of 50 years or more. It's water network has a lower average age, of 40 years. This makes WDC's water network among the oldest in the Otago and Southland regions.

Service	Age (avg)	C1	C2	C3	C4	C5	Unknown
Water Supply	40	0%	0%	0%	0%	0%	100%
Wastewater	50	23%	3%	0%	2%	1%	71%
Stormwater	55	0%	0%	0%	0%	0%	100%

The majority of WDC's water, wastewater, and stormwater networks are in an unknown condition. The proportion of wastewater assets rated as being in very good condition appears high compared to average asset age.

[8] Compared to previous year

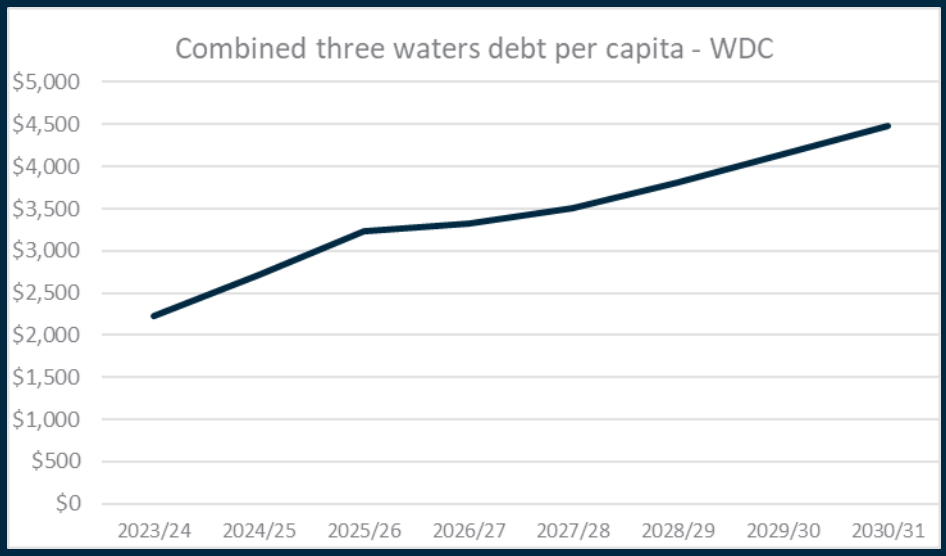


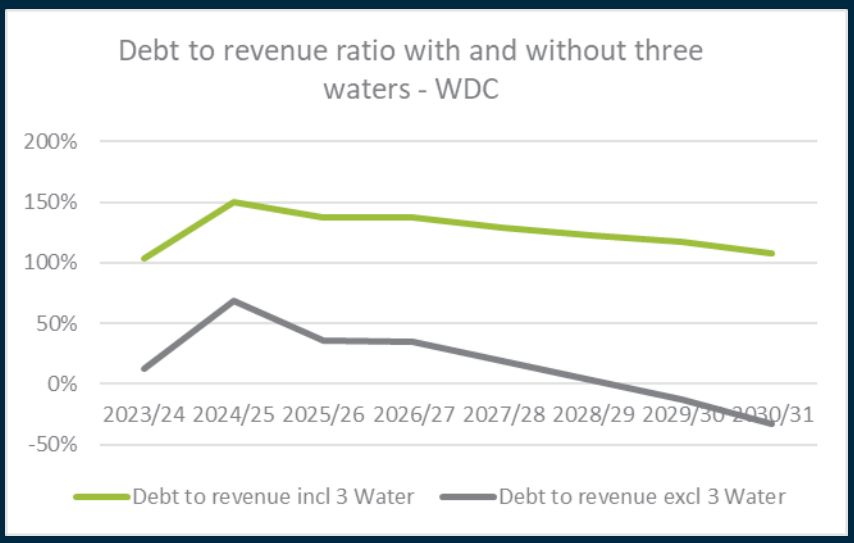
Three waters residential rates

Average residential rates (including GST) for three waters are expected to increase by 51% from approximately $1,380 in 2024 to over $2,050 by 2031.
Increases in planned investment since the 2021 LTP may increase rates by a further $1,600.
There may be a wide variation in actual charges due to the WDC's use of scheme based targeted rates.

Three waters debt

Net three waters debt is projected to increase from approximately $54 million in 2024 to over $110 million by 2031, or from $2,230 per head of population to over $4,470 per capita.





Whole of council debt

Council's total debt to revenue ratio is forecast to peak at 150% in 2025, and it is unlikely to exceed LGFA lending limits.

Transfer of three waters debt and revenue would improve Council's debt to revenue ratio, and improve its access to funding through LGFA. Negative values represent council holding investment assets that exceed its debt in later years.

We understand updated financial projections show debt significantly exceeding LGFA limits.

Appendix Three - Modelling assumptions

Assumptions applied to our "comparator" scenarios

In order to enable a like for like comparison between regional delivery options and the existing delivery model, we have made adjustments to financial and capital investment programmes provided by each council as the 'status quo'. These adjustments ensure that differences between regional delivery models are not purely the result of a different approach to managing revenue, debt and expenditure, or differences to underlying assumptions across the individual models.

This also means that the comparator scenarios presented in our modelling may not mirror an individual councils' current long term plan projections.

We have endeavoured to ensure that our approach aligns with the requirements of a water services delivery plan. This means that some councils may wish to use the comparator case from this modelling as a starting point for a water services delivery plan (WSDP) for in-house delivery. This is however a "best endeavours" approach, and councils may further refine capital programmes before preparing their WSDP.

Where councils are undertaking detailed asset and investment planning work this should then be used to inform their WSDP.

To assist councils in understanding the alignment of our comparator case with their own WSDP or LTP work, we have outlined the key adjustments and changes we have made below.

Operating expenditure

Our modelling of the comparator case scenarios for operating expenditure predominantly relies on each council's own operating budgets, as provided through our information request. Adjustments have been made to:

- Recalculate interest costs based on any amendments made to the capital works programme (refer below) and any additional revenue generated in order to stay within borrowing limits.
- Recalculate interest rates using a common interest rate across all councils. We have applied an interest rate of 5.52% in our modelling. Interest is calculated off the previous year's closing balance, meaning the effective interest rate is slightly lower than this when current year movements are considered.
- Recalculate depreciation based on any amendments made to the capital works programme. Depreciation rates are set at 1.53% for water supply, 1.53% for wastewater, and 1.47% for stormwater.
- Assets are revalued at 2% per annum and depreciation recalculated based off revalued asset base (including additions). This is broadly consistent with eh methodology currently proposed by Commerce Commission.
- Inflation is modelled at 2% per annum for years 11 – 30.

Capital expenditure

Capital expenditure is based on capital works programmes provided by Council staff with no adjustments in our base case. The impacts of changes in capital programmes is highlighted through our sensitivity testing.

Sensitivity testing scenarios that have been applied are outlined in, and are based on, the findings of the work completed by Utility NZ (**Appendix Four** - Southern CCO Programme Assurance Findings).

Revenue

Water Services Delivery Plan templates indicate some of the key measures that the Department of Internal Affairs (DIA) expect to be reported in relation to these tests, and therefore what may be expected by the Department. In particular:

- A chart demonstrating projected revenue versus projected costs including depreciation, and net operating surplus or loss. We anticipate that DIA are expecting revenue to at least equal total expenditure including depreciation based on the examples provided.
- An operating surplus ratio. DIA guidance notes that "Where this ratio percentage is negative, this represents the percentage increase required for revenues to cover costs". Costs in this ratio include depreciation.

Based on these questions, and additional commentary within the WSDP templates, we intend to model status quo arrangements to be fully funding depreciation from the 2028 financial year onwards. Councils that are not currently fully funding depreciation currently will be modelled to move to a fully funded scenario evenly over the remaining years.

In addition, from 2028 and beyond:

- Revenue has been modelled to "break even" before accounting for development contributions, vested assets and grants and subsidies.
- Additional revenue has been calculated to ensure that the council remains in borrowing limits. This revenue line is recovered through water/wastewater/stormwater charges and is calculated to be no more than the amount needed to remain within agreed debt caps.
- The additional debt repayment/control revenue is modelled to ensure that debt caps are not breached over the life of the modelling period, however the additional revenue is modelled over the entire modelling period, meaning revenue is collected in anticipation of debt otherwise exceeding limits. This will impact price paths, where councils may have otherwise deferred increases in revenue to a later year than our modelling. Our modelling attempts to smooth the impact of this increase.
- Development contribution revenue has been modelled to scale proportionally with changes in growth capital expenditure. Scaling is completed annually. Development contributions are only modelled where councils have provided details regarding expected development contribution revenue in their data.

Debt and borrowing costs

Revisions to capital works programmes, revenue, and expenditure all impact the amount of debt required by councils to fund their three waters activity. Our modelling recalculates three waters debt under the base case scenarios to ensure comparability with regional delivery models.

To calculate debt, we have:

- Assumed each councils' starting debt position is correct.
- Identified the cash surplus available from operations, development contribution receipts, and capital and operating subsidies.

- Subtracted the cost of capital works from the cash surplus.
- Where this value is negative, we have increased borrowings to fund the difference.
- Where this value is positive, we have modelled a debt repayment.

We have not assumed any "regular" debt repayments under a table loan facility. Council's typically borrow through bond issues that are repaid on maturity date. Our modelling effectively assumes that these bonds are renewed if needed. Our modelling also assumes that in any given year there will be sufficient bonds expiring that council will have the opportunity to repay debt if it holds surplus cash.

Assumptions applied to base data

We've also made the following minor additional assumptions to data provided by councils.

- The percentage of water, wastewater and stormwater revenue received from residential customers is assumed to be consistent with the percentage split across these activities as provided to WICS in their RFI of 2021.
- Where specific projections of the number of connections has not been provided, we've assumed connection growth continues at the rate of growth in rateable units.
- We've assumed the proportion of residential to non-residential customers is consistent with WICS RFI where detailed breakdown of these projections has not been provided.
- In all models, we have assumed that council revenue and debt relating to non-three waters activities is unchanged under all investment scenarios. That is, even where three waters investment, charges, or debt increase, we have assumed that there is no consequential or offsetting reduction in the corresponding expenditure/charge for non-three waters activities.
- In 30 years modelling, we have relied on capital programmes from infrastructure strategies or long term capital works plans provided to us by participating councils.
- Corporate costs, as provided, have been retained in the base case. Some of these costs may represent "stranded overhead" in individual councils, however we note that the amount of cost allocated varies greatly across councils, and assessment of the amount of stranded overhead in each council would not be possible without a detailed assessment of the cost allocation and apportionment approaches used by each council.

WSE assumptions

To create a Southern WSE and wholly owned WSE we have modelled transitional and organisational costs for a Southern WSE or wholly owned WSE, based on a ground up approach. The full details of costs included in our model are outlined below.

Operating and capital efficiencies

Efficiencies have been modelled using the efficiency data produced by the Water Industry Commission of Scotland (WICS) for the Department of Internal Affairs (DIA) as a base case, noting the following adjustments:

- The total achievable efficiency identified by WICS have been scaled back by 70% for the Southern WSE and 90% for a wholly owned WSE. These total achievable efficiencies have been compared to our bottom up estimates to confirm that the scaling is appropriate. This has reduced the baseline total achievable efficiencies from 50% capital and 53% operating efficiencies to 16% operating and 15% capital efficiencies.
- Efficiencies have then been scaled according to data produced by WICS in reports produced for DIA. This has resulted in modelled scale efficiencies of 11% capital and 12% operating efficiencies for the Southern WSE and between 1 - 3%% for wholly owned WSEs (depending on scale).
- We've assumed that these efficiencies are achievable over a 10 year period, commencing two years after the establishment of the WSE. Efficiencies are modelled as being achieved evenly over that time period.

Borrowing

The Government and the Local Government Funding Agency (LGFA) jointly announced that water entities would be able to borrow up to a 500% debt to revenue ratio. The fine print of that announcement noted that entities will actually be measured based on an FFO to debt ratio, with the intention that lending covenants would be set at such a level that the WSE could maintain an "investor grade" credit rating.

Our modelling adopts the following FFO ratios, based on recent discussions with, and guidance published in December 2024 by, LGFA:

- 12% for a wholly owned WSE
- 8% for the Southern WSE.

Modelling is designed to maintain debt close to these ratio throughout the modelling period.

Costs of change

Corporate overhead from each council has been replaced with costs for the Otago Southland WSE, and transition costs have been included:

- Increased compliance costs associated with regulatory reforms (recognising the role and requirements to report to both a service and economic regulator)
- The requirement to fund a levy imposed by Taumata Arowai and the Commerce Commission; these costs are included in all models
- Transitional costs to establish the Otago Southland WSE (assumed to be borne by the Otago Southland WSE)
- Additional resources required or additional costs for resources
- Any change is assumed for modelling purposes to take place on 1 July 2027.

Costs have been indexed using BERL inflation rates for water services through 2034, and 2% per annum thereafter.

For wholly owned WSEs we have compared transitional costs and ongoing operational costs to work completed for one of the councils in the working group by a different consultancy. Through this exercise we have confirmed that estimated transitional costs and ongoing operational costs are broadly consistent at a total level, despite different methodologies and approaches being used to determine those costs.

We therefore have a high level of comfort that the costs used are reasonable.

Transitional costs to establish a WSE

CCO transition costs were determined by comparing Morrison Low's initial assessment with bottom up work completed by a different consultant for one of the constituent councils. Given the increased level of detail in that work, we have applied those costs where appropriate in a wholly owned CCO model.

For clarity, total CCO costs are similar (typically +/- 10%) under either approach, however the distribution of costs differs.

Item	Wholly owned WSE	Southern WSE
Transitional team	Combined in single total	$2,325,000
Entity establishment		$7858,000
Business process design		$500,000
Communications and engagement		$500,000
Rebrand		$200,000
Restructuring costs		$300,000
Finance and funding workstream		$500,000
Legal and compliance costs		$500,000
Office set up		$1,230,000
ICT systems	$480,000 - $850,000	$7,000,000 (repeated in year 1 of WSE)
Total transition costs	$2,000,000 - $4,120,000	$13,840,000

CCO Costs and Benefits

CCO costs were determined by comparing Morrison Low's initial assessment with bottom up work completed by a different consultant for one of the constituent councils. Given the increased level of detail in that work, we have applied those costs where appropriate in a wholly owned CCO model.

For clarity, total CCO costs are similar (typically +/- 10%) under either approach, however the distribution of costs differs.

Item	Wholly owned WSE	Southern WSE	Rationale
Governance	$410,000	$480,000	Includes directors and the costs of supporting shareholder Councils & Māori to develop and implement accountability framework
Executive team and support staff costs	$1,530,000	$2,060,000	CEO & Four general managers Additional staff to create support structure. Includes HR, IT, Finance, health and safety and customer service + operational staff where required
IT infrastructure & systems	Scaled $400,000 - $850,000	$2,760,000	Uses Watercare IT budget as the basis and scaled based on population served
Auditor costs	None	$200,000	Additional costs for audit
Council rates	None	$640,000	The cost of paying rates to councils for water assets located on council land
Accommodation - office rent	$350,000	$300,000	15m^2 per staff member based on reviewing average office rental in Provincial centres ($250m^2) used. Allowance for all staff to have office space provides for costs of multiple locations
Office overheads	Combined in above	$30,000	10% of office accommodation cost for insurance, electricity etc

Appendix Four - Southern CCO Programme Assurance Findings

Southern CCO – Programme Assurance

This report provides an independent assurance assessment of the capital programmes for Clutha, Central Otago, Gore, Waitaki, and Timaru District Councils as they consider forming a joint Council-Controlled Organisation (CCO) for 3-Waters services.

Objective

The objective is to evaluate the financial confidence in baseline expenditure projections by analysing cost and planning assumptions, renewals investment sustainability, and sensitivity to proposed national wastewater standards. The findings will inform the financial modelling of the structure and pricing options for the CCO business case.

Methodology

The assessment employs a simplified risk-based scoring method to evaluate the likelihood of material changes to financial projections. This approach allows financial analysts to apply an indicative range to projections based on assessed risk levels.

Results

Cost Estimate Accuracy – Across the five Councils' short-term projects (Years 1-3) are generally well-defined with appropriate contingencies, medium- to long-term projects (Years 4-10) exhibit greater uncertainty due to reliance on early-stage cost estimates, inconsistent contingency application, and exposure to evolving regulatory requirements. This is not uncommon for long term plans, however.

Asset Sustainability and Renewals- The asset sustainability assessment identified varying levels of programme expenditure risk. While Central Otago DC, Waitaki DC, and Timaru DC demonstrate lower risks due to stable renewals investment, Clutha DC and Gore DC face medium to high risk of material changes to renewals expenditure from deferred investment combined with an ageing infrastructure base. Gore DC exhibits a significant backlog of renewals investment, combined with an asset based nearing the end of its service life. This is likely to require significant changes to the programme beyond Year 10, to maintain service levels.

Sensitivity to Wastewater Standards - Proposed national wastewater standards introduce a risk-based approach, potentially reducing treatment requirements and compliance costs for smaller schemes. This significantly increases the likelihood of material change to the baseline financial projections beyond the three-year window, particularly affecting Gore, Clutha, and Central Otago. The standards could lead to notable reductions in current programmes, especially for smaller wastewater schemes benefiting from lower treatment standards.

Commonality of Planning Assumptions - Lastly, it is important to ensure that all Water Service Delivery Plans are developed on consistent assumptions of affordability and of the service levels desired by the CCO. There is some inconsistency across the Councils at present, such as, projects being deferred or excluded due to funding constraints or uncertainties, while others have been less constrained and open about their network needs. Notable examples are

1. Waitaki DC may have several small scheme WWTP upgrades missing from its programme that create a high likelihood of material change for Wastewater programme later in the 10-year window. This is due to the high levels of uncertainty on the projects at the time to justify their inclusion in their programme.

2. By contrast, Gore DC has included a significant stormwater separation project (> $200m over 30 years), which also transparently addresses significant service level deficits for the district.
3. CODC has programmed a significant investment in growth which reflects a proactive approach to servicing future communities, but it also assumes that revenue will be recovered as and when projected.
4. Clutha DC have assumed several WWTP plants will need to be brought forward for re-consenting due to recent non-compliance. This may change with the proposed WW Treatment Standards.

Summary of Findings

The assessment identifies varying levels of risk to the baseline capital programme across the Councils. While short-term financial outlooks are stable, long-term risks remain significant due to uncertainty in cost estimates, ageing assets, and evolving regulatory requirements. Clutha and Gore are expected to experience medium to high risks of material changes, while Central Otago and Waitaki face moderate risks over the medium term. Timaru shows consistently low risk across all 3-Waters due to their historic investment in treatment and focus on renewals over the coming years.

<table>
<tr><th rowspan="2">Council</th><th colspan="3">Risk of Material Change and Financial uncertainty to apply to Baseline</th></tr>
<tr><th>Year 1 to 3</th><th>Years 4 to 10</th><th>Year 10 to 30</th></tr>
<tr><td>Clutha DC</td><td rowspan="5">🟢 - Low Risk (-5%/+10%)</td><td>🟠 - Medium Risk (-10%/+20%)</td><td rowspan="5">N/A (see note below)</td></tr>
<tr><td>Central Otago DC</td><td>🟠 - Medium Risk (-10%/+20%)</td></tr>
<tr><td>Gore DC</td><td>🔴 - High Risk -10%/+25%</td></tr>
<tr><td>Waitaki DC</td><td>🔴 - High Risk -10%/+25%</td></tr>
<tr><td>Timaru DC</td><td>🟢 - Low Risk -5%/+10%</td></tr>
</table>

NB: Of note, is that long-term planning is inherently uncertain. The level of policy, regulatory, and legislative reforms over the past six years has amplified this further. This uncertainty limits the value in assessing the confidence in planned expenditure beyond the 10-year horizon. However, quantifying the key investments necessary remains important for the CCO, including major asset renewals to maintain service levels and resource consent renewals for wastewater and drinking water infrastructure. These have been provided by all five Councils.

Recommendations

To enhance financial confidence in the future CCO, Councils could commit to a Memorandum of Understanding or similar agreement to standardise their programme planning assumptions on service levels, standards, cost estimation practices, and renewals investment strategies.

Also, given the significant sensitivity, to the proposed WW standards on investment levels, Councils could also commit to undertaking a deeper review of these projects once these standards are legislated for.

These assumptions greatly influence service pricing, particularly with consumer price protection imminent. A unified commitment could highlight the broader value of the reforms to key stakeholders and other interested parties.

About Utility

Utility is a specialist infrastructure advisory firm with expertise in asset management, financial assurance and capital investment planning. Utility has worked extensively within local government, providing independent assessments that support sound decision-making for infrastructure projects. Our approach combines technical rigor with strategic insights to ensure investment programmes are pragmatic, cost-effective, and aligned with regulatory requirements.

Disclaimer

This report is based on information provided by the Councils and publicly available data at the time of assessment. While every effort has been made to ensure accuracy, the findings and recommendations are subject to change based on new information or regulatory adjustments. This report does not constitute financial or legal advice and should be used as a decision-support tool rather than a definitive financial forecast.

Version Status and History

Version	Issue Date	Author	Status and Changes
1.0	13th March 2025	Vaughn Crowther	Final for Morrison Low

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Context

Gore, Central Otago, Clutha, and Waitaki are exploring options for a joint Council-Controlled Organisation (CCO) to deliver 3-Waters services. CCO options are to be considered in March, with a preferred option to go to public consultation in April / May. Before moving forward, stakeholders need confidence that the proposed CCO and regional pricing model is based on robust baseline expenditure programmes. In particular:

1. How reliable and accurate are the 10-year financial projections (baseline) of each Council?
2. What degree of confidence can we place in the financial projections, in terms of the commonality of planning assumptions, and of any potential changes resulting from deferred or un-budgeted projects?
3. Furthermore, if and how will the proposed regulatory changes to wastewater standards impact on the current baseline programme?

Objective

To assess the confidence in baseline expenditure projections by analysing cost assumptions, renewals investment sustainability, and regulatory change sensitivities. The findings will inform the financial modelling of the structure and pricing options for the CCO business case.

Method of Scoring

To assist financial analysis and provide clarity when adjusting the 10-year financial projections for the combined Councils, a simplified risk-based scoring method has been employed. This approach allows financial users to easily apply an indicative plus or minus range to projections based on assessed risk levels.

To assist financial analysis and clearly inform adjustments to the 10-year financial projections for the combined Councils, a simplified risk-based scoring method has been applied. This method provides financial analysts with a straightforward way to incorporate an indicative plus or minus range into financial projections.

A 'material change' refers to a variation in project budgets exceeding 15% of the original cost estimates.

Score	Description	Recommended financial adjustment range:
🟢 - Low Risk of Material Change	Budget estimates are highly reliable, with minimal likelihood (<10%) of significant changes.	- 5% / +10%
🟠 - Medium Risk of Material Change	There is moderate uncertainty (10% to 50% likelihood) that budgets will materially change,	-10% /+ 20%
🔴 - High Risk of Material Change	There is a substantial likelihood (>50%) that project budgets will experience material changes	10% / + 25%

Application to Financial Projections

Financial analysts should apply these ranges to the 10-year financial projections, ensuring projections include appropriate financial buffers for uncertainties, especially for medium and high-risk rated projects. Low-risk projects require minimal adjustments due to their greater budget certainty.

Method of Assessment

This Programme Assurance report provides an independent assessment of the financial confidence in the Councils' proposed 10-year capital plans. It specifically evaluates:

1. Cost Estimation Assurance – To understand the likelihood of material changes to budgets, in years 1 to 3, and years 4 to 10
2. Asset sustainability – The likelihood of long-term renewals backlog having a material impact on the baseline.
3. Sensitivity to National Wastewater Treatment Standards.
4. The commonality (or not) of key planning assumptions and if projects / investments of material size are excluded that should not be.

The method of assessment used was:

1. Focussed on the areas creating the most risk to the baseline– By applying an 80/20 rule, the high costs projects in years 1 to 3, and again for years 4 to 10 were identified.
2. Engaged directly with Asset Managers on these high risk / cost projects to establish estimation method, contingency levels and remaining scope risk not priced- in.
3. Identified missing projects by reviewing long-term and annual plans, Taumata Arowai registers etc.
4. Applied assumed Wastewater Standard assumptions by classifying schemes based on size and assessing each planned WW upgrade.
5. Reviewing findings with individual Council GMs and the Project Team.
6. Sharing preliminary findings with DIA for feedback.

Cost Estimation Assurance

This aspect of assessment aimed to understand the following questions:

1. *Are the cost estimates in the capital programme well-founded, given their scale and timing, and if not, are the levels of contingency included, appropriate to reflect this risk?*
2. *Are there critical projects / expenditure missing from the programme that could pose a financial risk in future planning cycles? Included is the expectation that universal water metering will come into effect within 3 years of the establishment of the CCO (Post 2027).*

Methodology Used for Cost Estimate Assurance

For expedience, the method used to assess cost estimates was as follows:

1. Identify High-Cost Projects - An 80/20 approach was taken, to identify the highest cost projects that make up most of the planned expenditure over 10 years, and 30 years where significant. Only level of service driven projects were assessed, and growth projects with a high proportion of level of service cost allocation (>40%).

Then of these projects, the following was established through interviews and review of project information provided:

2. How were cost estimates for the specific projects developed? For instance, using historical cost data being inflated, consultant estimates?
    a. If a consultant's estimate was used, to what level? (Level 0 – Order of Magnitude, Level 1 – Conceptual, Level 2 – Preliminary, Level 3 – Detailed Design, Level 4 – Tendered).
    b. If not, is the level of contingency appropriate for the project's stage, timing and complexity?
3. In terms of risks to scope, how well is the project defined to avoid material scope creep?

Risk levels are applied using the following indicators. * A material shift is defined as a budget change of more than 15% relative to initial cost estimates.

Risk Level	Definition	Indicators
🟢 Low Risk of Material Change	Minimal likelihood (<10%) of material* shifts.	- Estimates at Level 3+ (Detailed/Tendered) - Contingency applied appropriately for project stage - Well-defined project scope with low variation potential
🟠 Medium Risk of Material Change	Some likelihood (10% to 50%) of material change exists but may be manageable	- Estimates at Level 2-3 (Preliminary/Detailed) - Contingency exists but is inconsistent to the remaining scope uncertainty - Some scope uncertainty, but moderate confidence in assumptions - Expected in Years 3-7 project
🔴 High Risk of Material Change	Significant likelihood (>50%) of material programme shifts.	- Estimates at Level 1-2 (Order of Magnitude/Preliminary) - Contingency is unclear or insufficient - Scope is not well-defined, making cost overruns >15% likely - Missing projects that could drive unplanned capital increases - Expected in Years 7+ projects, unless significantly large.

Results

Clutha DC

The original capital programme assessed was revised down significantly, from $116.3M to $37.1M, following the provision of updated cost estimates. The revised programme has been assessed as low risk of material change, with most projects in the near term already in construction or at the tender stage, improving cost certainty.

Timeframe	Risk Rating	% of Spend	Reasoning
Years 1-3:	🟢 Low Risk	35% ($13.0M0	Most of these projects are at scoping, tender, or construction stage, reducing cost uncertainty.
Years 4-10:	🟠 Med Risk	65% ($24.1m)	Estimates have been updated and a 30% contingency applied, reflecting the high scope risk that remains.

Items of note:

- Clutha has scheduled zone metering for most schemes within 3 years. However, universal metering will require a larger level of CAPEX than is scheduled.

Central Otago DC

The total high-risk capital programme assessed was $122.2M, which makes up 62% of all Level of Service CAPEX over the next 10 years. A large portion of projects are growth-driven, with significant level-of-service improvements. Cost certainty is higher in the near term, while longer-term WWTP projects have some exposure to regulatory changes.

Timeframe	Risk Rating	% of Spend	Reasoning
Years 1-3:	🟢 Low Risk	33% ($40.6M)	Projects in this period have greater cost certainty, as they are progressing through tender, construction, or advanced planning. While there is some exposure to regulatory-driven scope adjustments, cost estimates are well-developed with appropriate contingencies applied.
Years 4-10:	🟠 Med Risk	67% ($81.6m)	Projects in this period are based on Level 2 estimates, with a reasonable contingency applied, supporting cost confidence. However, longer-term infrastructure upgrades remain exposed to scope changes and regulatory factors, particularly for wastewater treatment.

Items of note:

- Significant amounts of the Capital Programme are to service projected growth in the district.
- CODC is already fully metered with volumetric charging in place for drinking water.

Gore DC

The total high-risk capital programme assessed was $67.6M, which makes up 94% of all Level of Service CAPEX over the next 10 years. The greatest risk remains in Years 4-10, where most projects still lack detailed cost certainty, and missing projects could result in budget shortfalls. The stormwater separation project, in particular, carries high financial and scope uncertainty due to its reliance on preliminary modelling rather than detailed cost estimation.

Timeframe	Risk Rating	% of Spend	Reasoning
Years 1-3:	Low Risk	21% ($14.3m)	Cost certainty is moderate due to a mix of more detailed (Level 3) and preliminary (Level 0-2) estimates on specific projects. Stormwater separation is acknowledged as an ongoing programme with set budgets each year.
Years 4-10:	High Risk	79% ($53.3m)	Most projects rely on early-stage cost estimates (Level 0-2), increasing the likelihood of cost changes. Scope and cost risk is high for the planned stormwater separation programme beyond the 10-year window.

Items of note:

- A significant stormwater separation programme is planned over the long term of 30 years (>$200m). The project is addressing service level deficits and health risks from localised flooding, which will likely increase due to climate change.
- The programme has included CAPEX for universal water meter rollout.
- Utility have observed that this cost of this programme exceeds the replacement cost of the entire stormwater network of the district (c. $42m), by several orders of magnitude. There is a likelihood that a programme of this scale will require extensive review and is primarily included to highlight a significant issue that needs addressing.

Waitaki DC

The total high-risk capital programme assessed was $96.5M, which makes up 83% of all Level of Service CAPEX over the next 10 years. The greatest financial risk exists in Years 4-10, where most projects lack detailed cost certainty, and scope changes could drive significant budget increases.

Timeframe	Risk Rating	% of Spend	Reasoning
Years 1-3:	🟠 Medium Risk	18% ($17.4m)	Projects in this period have better cost certainty, being closer to execution with more detailed cost estimates. However, some estimates remain at Level 2 (Preliminary), and contingency application is inconsistent, increasing the risk of minor cost overruns.
Years 4-10:	🔴 High Risk	82% ($79.1m)	Most projects rely on early-stage cost estimates, increasing the likelihood of material cost changes. Scope risk is high, particularly for wastewater and stormwater projects. Additionally, missing compliance-related investments (Lake Ohau, Kurow, Palmerston, Omarama, Hamden, Moeraki WWTPs) could result in significant unplanned capital increases at the end of 10-year programme.

Items of note:

- Several wastewater projects are excluded from the current programme that will have a material impact on wastewater investment levels in years 4 to 15. It has been stated that this is due to the high levels of uncertainty regarding their scope, timing and possible solutions.
- The programme has included CAPEX for universal water meter rollout.

Timaru DC

The total high-risk capital programme assessed was $161M, which makes up 58% of all CAPEX over the next 10 years. The greatest financial risk exists in Years 4-10, where most projects lack detailed cost certainty, and scope changes could drive significant budget increases.

Timeframe	Risk Rating	% of Spend	Reasoning
Years 1-3:	🟢 Low Risk	42% (68.1m)	Projects in this period have a mix of low and medium-risk cost estimates. However, a minimum of 30% contingency is in place across all budgets, which mitigates this risk sufficiently. The large projects planned within the next 12 months, have design level cost estimates.

Timeframe	Risk Rating	% of Spend	Reasoning
Years 4-10:	Medium Risk	58% (92.7m)	Larger projects in this period are more exposed to high-risk cost estimation and scope uncertainty, with early-stage estimates and scope uncertainty despite 30% contingencies applied to all.

Items of note

- Most of the programmed investment is on the renewal of existing assets. Investments to meet drinking water standards and wastewater consents have largely been delivered for the district.
- The programme has included CAPEX for universal water meter rollout.

Asset Sustainability

This assessment determines the likelihood of an unrecognised long-term backlog or liability for asset renewals in investment programmes, excluding accumulated depreciation reserves, having a material impact on the baseline programme.

Does the current level of renewals investment pose a significant future spending liability for the CCO that is not accounted for?

Method

The sustainability of renewals investment considers the likelihood that additional renewals expenditure will be needed beyond what is planned, due to unexpected asset failures. This looks at two key indicators in combination.

Average Age - It looks at this at a very high level, over the next 10 to 30 years. It is assessed by comparing the average age of the assets, calculated from its depreciated replacement cost (proxy of life remaining) divided by its gross replacement cost (Proxy life expectancy). The lower this % value indicates the higher the risk of asset failure. i.e. the assets are nearing end of life.

Ther rate of ageing - This is then considered with another analysis, of whether future planned renewals spending is keeping pace with the rate at which the assets are ageing. If it is not, then the risk of asset failure is increasing. This will also increase the need for additional expenditure.

Exclusions - Preferably, as assessment of the age distribution of the assets would provide a more accurate assessment of age. i.e. understanding the 75%tile of age rather than average age. Also, projects deemed a renewal, yet also provided significant service level or growth benefits were excluded, particularly if they distorted results.

The following indicators of risk were applied to each Council:

Risk Level	Definition	Indicators
🟢 Low Risk of Material Change	Minimal likelihood (<10%) of material* shifts.	- Assets are relatively young and/or have renewals investment adequately matching or exceeding the rate of asset ageing (Renewals/Depreciation ratio >1)
🟠 Medium Risk of Material Change	Some likelihood (10% to 50%) of material change exists but may be manageable	Assets are middle aged, with renewals investment not reflecting this risk. Renewals investment lagging behind asset ageing (Renewals/Depreciation ratio approximately 0.6–1).
🔴 High Risk of Material Change	Significant likelihood (>50%) of material programme shifts.	Significant risk due to an older asset base and inadequate renewals investment reflecting this. (Renewals/Depreciation ratio <0.8), likely requiring substantial future expenditure adjustments.

Where material is defined as being a change in budgeted costs of greater than 15%.

Clutha DC

There is a likelihood of material change to the renewals programme. Assets are approximately halfway through their life, with a reasonable level of investment now underway to stop the net ageing.

Clutha DC	Average Life Remaining (DRC / GRC)		Rate of Ageing (Renewals / Depreciation over 10 years)	Risk to Renewals Programme
Wastewater	57%	Middle aged	0.5 Assets are ageing	Med Risk
Water Supply	60%	Middle aged	1.5 Getting younger	- Low Risk
Stormwater	49%	Middle aged	1.6 Getting younger	Medium Risk
			Overall Score	Medium Risk

Items of note:

- c. $5m of Cast Iron main renewals in the water network have been deferred beyond the 10-year window during the LTP on affordability grounds.
- Large proportions of the pipe assets have been recorded with expected lives at over 100 years. This can skew results greatly if not correctly assumed.

Central Otago DC

There is a low risk of material changes anticipated in the next 10 years.

Central Otago DC	Average Life Remaining (DRC / GRC)		Rate of Ageing (Renewals / Depreciation over 10 years)	Risk to Renewals Programme
Wastewater	60%	Middle aged network	0.9 – Asset age is steady	- Low Risk
Water Supply	70%	Young network	1.0 – Age is steady	- Low Risk
Stormwater	57%	Middle aged network	0.6 Assets are ageing	Medium Risk
			Overall Score	- Low Risk

Items of note

- Central Otago's rate of growth in new and vested assets could be outpacing the average ageing rate (depreciation). This could skew these metrics by reducing the average asset age over time. An assessment of 75%tile age would improve this understanding.

Gore DC

There is a high likelihood of material change, particularly post year 10. Large parts of the assets network are near the end of life also, with annual renewals spend still well below what is needed to halt this decline. Particularly for WW and SW. This indicates a high amount of asset renewals will be necessary, beyond what is programmed.

Gore DC	Average Life Remaining (DRC / GRC)		Rate of Ageing (Renewals / Depreciation over 10 years)	....and over 30 years	Risk to Renewals Programme
Wastewater	36%	An old network	0.7 Assets are ageing	0.5 Assets are ageing	High Risk
Water Supply	29%	An old network	1.2 Getting younger	1.0 Age is steady	High Risk
Stormwater	28%	An old network	0.2 Assets are ageing	4.4 Getting younger rapidly (see note)	High Risk
				Overall Score	High Risk

Items of note:

- Gore DC believes their asset sustainability is slightly better than presented in this assessment but acknowledges having the oldest infrastructure network does pose significant risk of cost increases. Gore DC has been pro-actively managing the tension between asset renewal needs and affordability for their community. Their renewals programme was deferred on affordability grounds recently, so the 30-year programme has been included to assess this.

Waitaki DC

There is low risk of a material change to the renewals anticipated in the next 10 years. The network has over half of its life left by value, and the rate of replacement largely matches the rate of ageing.

Waitaki DC	Average Life Remaining (DRC / GRC)		Rate of Ageing (Renewals / Depreciation over 10 years)	Risk to Renewals Programme
Wastewater	65%	Middle aged	1.4 Getting younger	- Low Risk
Water Supply	60%	Middle aged	0.8 Assets are ageing	- Low Risk
Stormwater	52%	Middle aged	0.8 Assets are ageing	Medium Risk
			Overall Score	- Low Risk

- The Oamaru Rising main duplication and Oamaru Muddy Creek stormwater capacity upgrade were removed from the renewals programme assessment. These may have been costed as renewals, possible incorrectly, which was skewing the assessment significantly.

Timaru DC

There is low risk of a material change to renewals anticipated in the next 10 years. The network has over half of its life left by value, and the rate of replacement exceeds the rate of ageing by several orders of magnitude.

Timaru DC	Average Life Remaining (DRC / GRC)		Rate of Ageing (Renewals / Depreciation over 10 years)	Risk to Programme
Wastewater	58%	Middle aged	4.7 Getting younger	● - Low Risk
Water Supply	55%	Middle aged	5.3 Getting younger	● - Low Risk
Stormwater	50%	Middle aged	3.9 Getting younger	● - Low Risk
			Overall Score	● - Low Risk

Sensitivity to National Wastewater Treatment Standards

This section evaluates the likelihood of material changes to planned Wastewater Treatment Plant upgrades from the proposed Wastewater National Treatment Standards.

The assessment is a score that indicates the level of sensitivity to a material change, where material is a budget change of more than 15% relative to initial cost estimates.

🟢 - **Low Risk of Material Change** – Minimal likelihood (<10%) of material shifts in overall Wastewater Treatment Plant cost estimates.

🟠 - **Medium Risk of Material Change** – Some likelihood (10% to 50%) of material shifts in overall Wastewater Treatment Plant cost estimates, requiring adjustments to the programme.

🔴 - **High Risk of Material Change** – Significant likelihood (>50%) of material shifts in Wastewater Treatment Plant cost estimates, requiring major adjustments to current programmes.

Explanation of the New Wastewater Standards

Proposed national wastewater standards were released for public consultation on 26th February. They aim reduce the amount of expenditure on wastewater treatment by, streamlining consenting processes, taking a more risk / impact-based approach to wastewater discharges standards. The standards differentiate requirements based on discharge type (water or land) and scheme size as a proxy for environmental impact.

Method and Assumptions

The assessment applied to WWTP cost estimates have used the following assumptions:

1. For WWTP's that discharge to water (Freshwater and Oceans):
   - Schemes with access to large water bodies may benefit from dilution capacity, which can influence discharge conditions and **potentially reduce treatment requirements**.
   - Schemes serving fewer than 1,000 users will not require nitrogen or phosphorus removal under the proposed land discharge standards. While this is not explicitly stated for water discharge schemes**, it suggests that smaller loads may not require advanced nutrient removal.**
2. For WWTPs discharging to land:
   - The standards remove land disposal requirements to account **for cultural considerations**; however, Councils can still pursue this pathway if desired.
   - Treatment requirements are now risk-based, **meaning land discharge schemes will be classified** by site suitability and environmental sensitivity.
3. Consenting terms
   - All consents will have a 35-year term.
   - Schemes with consents expiring within two years of the new standards taking effect **can request a two-year extension**.
   - The new standards aim to streamline the consenting process, **reducing the existing administrative process of consent applications** (c. 40% of costs stated in standards).
4. Enabling efficiencies and 'Packaged Plants' as an option:

- Standardising requirements across the country enhances scalability and supports the use of modern packaged wastewater treatment plants, improving efficiency and affordability, particularly for smaller schemes.
- Direct liaison with the DIA indicates a **maximum WWTP upgrade cost of $15k–$20k per connection** is being targeted for smaller schemes (< 1,000 people).

Sensitivity to Standards	Reasoning
Clutha DC -c. $52m of planned WWTP upgrades in the current programme is planned	
🟠 Medium Risk of Material Change	Several small schemes under 1,000 pax requiring lower treatment and Milton (larger scheme). However, there remains a reasonable level of uncertainty in their need at all, as they are planned due to non-compliance with existing consents standards. The new standards may reduce this risk and defer them—or reinforce the need for earlier upgrades, depending on their final form. Cost estimates have already dropped significantly (c. 75%) from recent WWTP re-estimations, incorporating revised land treatment assumptions (prior to release of the WW Standards).
Central Otago DC - c. $57m of WWTP Upgrade CAPEX is planned.	
🟠 Medium Risk of Material Change	Alexandra WWTP remains unchanged, as further adjustments would increase risk. Omakau WWTP has been reassessed, with changes made to align with revised expectations. Lake Roxburgh Village remains unchanged. While some flexibility may emerge in discharge requirements under the new standards, the overall impact on treatment processes is expected to be limited with large amounts allocated to growth and renewal.
Gore District Council –c $77m of WWTP Upgrade CAPEX is planned.	
🔴 High Risk of Material Change	Sensitivity to the proposed changes is high for the Gore and Mataura WWTP planned upgrades. Primarily due to removal of land purchase and wetland development originally included for cultural treatment at Gore WWTP. For Mataura WWTP, sensitivity is material but less significant as the existing discharge is expected to align with proposed regulatory standards, eliminating the immediate need for significant upgrades.
Waitaki District Council c. $27m of WWTP Upgrade CAPEX is planned.	
🟠 Medium Risk of Material Change	Several smaller schemes (Duntroon, Kurow, Lake Ohau, Omarama, Palmerston) may be affected, but some, like Lake Ohau, could see upgrade needs largely unnecessary under the new standards. Of greater uncertainty, is that several schemes lack a confirmed scope or funding and are excluded from the programme.
Timaru District Council No WWTP upgrade CAPEX planned.	
🟢 - Low Risk of Material Change	Timaru have already invested significantly in their Wastewater treatment plants in recent years and have long term consents in place. No material changes are anticipated.

Summary of Findings

This assurance assessment has identified varying levels of risk to the baseline capital programme across the five Councils. While the short-term financial outlook is stable, long-term risks remain significant due to uncertainty in cost estimates, aging assets, and evolving regulatory requirements.

	Year 1 to 3	Years 4 to 10
Clutha DC	Near-term budgets have high accuracy. Medium-term risks emerge primarily due to wastewater regulatory changes and moderate ageing of stormwater assets, though water assets are sustainably managed.	
Water Supply	Low (-5%/+10%)	Medium (-10%/+20%)
Wastewater	Low (-5%/+10%)	Medium (-10%/+20%)
Stormwater	Low (-5%/+10%)	Medium (-10%/+20%)
Central Otago DC	Cost certainty strong in short-term but moderate risks emerge longer-term, particularly with wastewater upgrades due to proposed standards.	
Water Supply	Low (-5%/+10%)	Medium (-10%/+20%)
Wastewater	Low (-5%/+10%)	Medium (-10%/+20%)
Stormwater	Low (-5%/+10%)	Medium (-10%/+20%)
Gore DC	Immediate cost certainty acceptable but long-term high risks exist across all asset classes, driven by ageing infrastructure, significant deferred renewals, and sensitivity to WW standards.	
Water Supply	Low (-5%/+10%)	High (-10%/+25%)
Wastewater	Low (-5%/+10%)	High (-10%/+25%)
Stormwater	Low (-5%/+10%)	High (-10%/+25%)
Waitaki DC	Short-term cost reliability is good, but medium-term risk exists from slightly insufficient renewal budgets and uncertainties in wastewater project scope and regulatory impacts.	
Water Supply	Low (-5%/+10%)	Medium (-10%/+20%)
Wastewater	Medium (-10%/+20%)	High (-10%/+25%)
Stormwater	Low (-5%/+10%)	Medium (-10%/+20%)
Timaru DC	Consistently low risk across asset classes with robust renewals investment and stable asset conditions, requiring minimal financial adjustments.	
Water Supply	Low (-5%/+10%)	Low (-5%/+10%)
Wastewater	Low (-5%/+10%)	Low (-5%/+10%)
Stormwater	Low (-5%/+10%)	Low (-5%/+10%)

Long-Term Planning Uncertainty beyond Year 10

The very nature of long-term planning means it carries inherent uncertainty, particularly given the significant policy, regulatory, and legislative reforms that have shaped the last two Long-Term Planning (LTP) cycles. Given this context, assessing the confidence of planned expenditure over the 10- to 30-year horizon other than low, is inherently limited in value.

However, it remains important to identify key known investments that will be necessary within these longer-term timeframes. These include:

- Major asset renewals, which will be required to maintain service levels.
- Resource consent renewals, particularly for wastewater and drinking water infrastructure.

Recommendations

To strengthen the confidence in the financial projections of the proposed CCO and any pricing model options, the following actions are recommended.

1. Standardised Capital Planning & Cost Estimation Practices
    - Introduce a structured cost estimation framework that standardises how contingencies and cost escalations are applied.
    - Councils should also commit to a Memorandum of Understanding (MoU) or similar, to align cost estimation methodologies, service level expectations, and renewals investment strategies.
2. Targeted Review of High-Cost Investments and Regulatory Changes
    - Conduct a detailed review of high-cost projects (>$10m) with early-stage estimates, particularly for Gore DC's stormwater separation and Waitaki DC's wastewater upgrades.
    - Once wastewater standards are formalised, also conduct a detailed review of planned wastewater treatment plant upgrades.

Furthermore, as consumer pricing will be a critical aspect of any future service delivery model for 3-waters, the planning processes and assurance levels will need to be explicitly driven by the effect to future customer prices, not just financial forecasts.