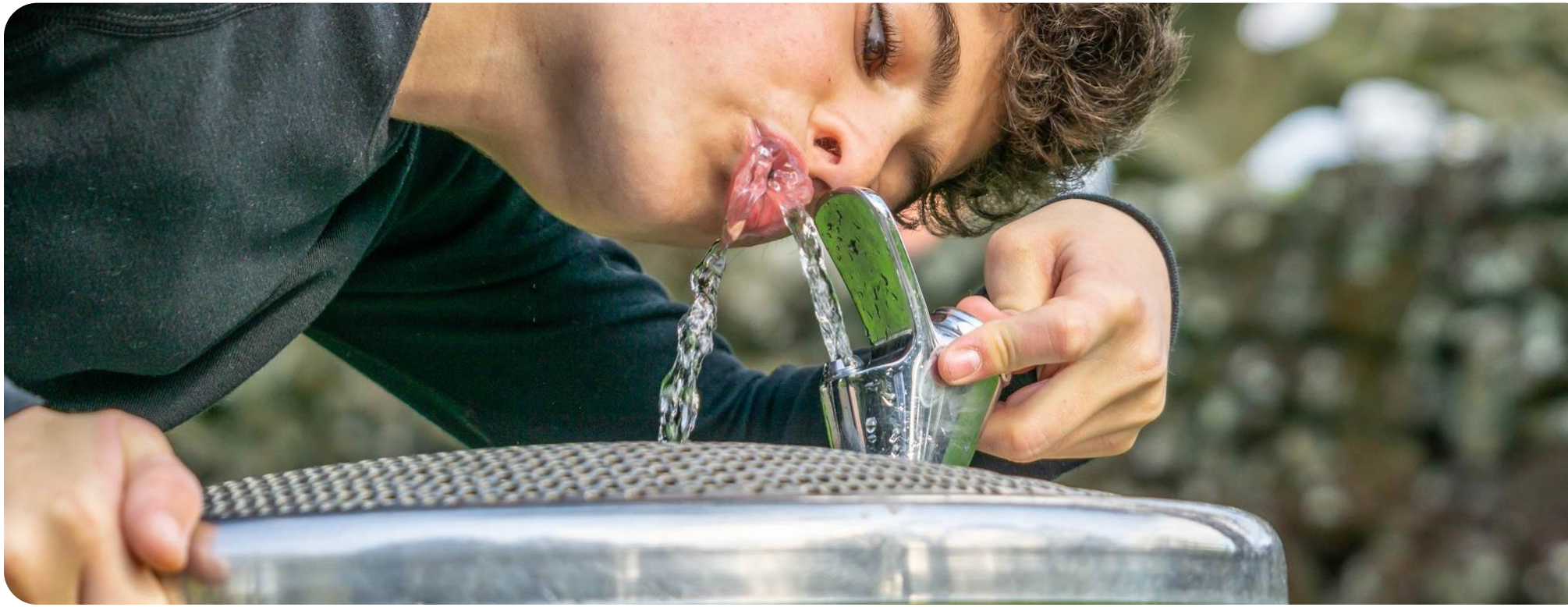

Joint Water Services Organisation

Financial assessment - Bay of Plenty sub-region (including Thames Coromandel District)

Final Report

04 March 2025

Commercial in Confidence

Preface

This report has been prepared for Western Bay of Plenty District, Thames Coromandel District, Whakatāne District and Tauranga City Councils by MartinJenkins.

For over 30 years MartinJenkins has been a trusted adviser to clients in the government, private, and non-profit sectors in Aotearoa New Zealand and internationally. Our services include organisational performance, employment relations, financial and economic analysis, economic development, research and evaluation, data analytics, engagement, and public policy and regulatory systems.

We are recognised as experts in the business of government. We have worked for a wide range of public-sector organisations from both central and local government, and we also advise business and non-profit clients on engaging with government.

Kei te āwhina mātau ki te whakapai ake i a Aotearoa. We are a values-based organisation, driven by a clear purpose of helping make Aotearoa New Zealand a better place. Our firm is made up of people who are highly motivated to serve the New Zealand public, and to work on projects that make a difference.

Established in 1993, we are a privately owned New Zealand limited liability company, with offices in Wellington and Auckland. Our firm is governed by a Board made up of Executive Partners and Independent Directors. Our Independent Directors are Sophia Gunn and Chair David Prentice. Our Executive Partners are Sarah Baddeley, Nick Carlaw, Allana Coulon, Nick Davis, and Richard Tait. Michael Mills is a non-shareholding Partner of our firm.

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Introduction and purpose

Introduction and purpose

Joint Councils engaged MartinJenkins to undertake a high-level financial assessment of a possible Joint Water Services Council Controlled Organisation – including Tauranga City Council, Western Bay District Council, Whakatāne District Council, and Thames Coromandel District council

To inform the preparation of its Water Services Delivery Plan required by the Local Government (Water Services Preliminary Arrangements) Act 2024, participating councils wish to understand the potential financial implications of various joint WSCCO options.

Local Water Done Well requires councils to demonstrate their delivery of water services is financially sustainable

The Government's Local Water Done Well policy means councils across New Zealand will need to assess whether their water services delivery arrangements are, and will continue to be, financially sustainable over the medium- to longer-term.

Councils also need to consider whether existing service delivery arrangements will continue to meet community expectations regarding levels of service, achieve compliance with future regulatory requirements, while remaining affordable for their communities.

Future legislation is expected to require that councils demonstrate their water services can stand on their own two feet. This means that:

- rates and water charges are ring-fenced and only used to pay the costs of water services
- rates and water charges generate sufficient revenue to fully-fund operating and financing costs over the medium-term, and
- investment to maintain and renew assets, to meet regulatory requirements, and provide for growth can be funded and financed on a sustainable basis.

A Water Services Council Controlled Organisation offers additional financial benefits compared to in-house delivery options

A WSCCO has the ability to borrow at higher gearing ratios than councils, while also borrowing at rates similar to councils due its ability to access LGFA lending. The potential economies of scale from amalgamating assets and service delivery, ability to optimise capital structure, alongside professional governance and management, mean there are likely efficiencies available to those who participate, relative to in-house delivery opdtions.

This report assesses how joint WSCCO delivery models could benefit participating councils, collectively and individually, through enabling greater efficiencies and more efficient capital structures.

It presents these findings for a joint WSCCO comprising all participating councils under three scenarios:

1. Balanced budget
2. Accelerated investment
3. Optimised prices

It also provides an indicative assessment of costs to consumers under scenario three where prices are harmonised and where they are not.

Further scenarios that explore alternative mixes of council participants are included as appendices for reference.

We have relied on council inputs and an agreed set of assumptions

In undertaking this analysis, we have relied on information provided by the participating councils and used assumptions agreed upon by them (refer Appendix A). These assumptions guide the scope of potential outcomes and inform the overall conclusions regarding the financial and operational viability of the proposed joint WSCCO model. Changes to these underlying assumptions will likely have a material impact on the outcomes presented in this report.

Limitations

This is a point-in-time, indicative assessment of stylised WSCCO scenarios to inform decision making.

This analysis represents a snapshot in time, based on the data, assumptions and information available at the date of this report. As circumstances, policies and council data evolve, this assessment, in whole or part, may become out of date and warrant re-evaluation.

We have relied on council-provided information and have not verified its accuracy.

The modelling outputs are dependent on the accuracy and completeness of information provided by participating councils. Any errors, omissions or inconsistencies in that information may affect the reliability of the findings, and have not been independently verified by us.

Scope of analysis is limited to indicative financial implications only.

Work focuses on the potential structure and outcomes of a joint water services council-controlled organisation. It does not examine potential flow-on effects for other parts of the councils' operations and delivery arrangements, nor does it evaluate the underlying capital delivery programme. It is high-level, indicative analysis and does not constitute a detailed business case nor provide information sufficient to support implementation planning.

The outputs should be considered representative rather than exhaustive.

The purpose of this modelling is to provide a representative analysis based on current assumptions. It is not an exhaustive analysis or a detailed operational review. Users of this report should exercise caution when extrapolating the results beyond the specific scenarios modelled.

Ongoing changes and updates.

Given the dynamic nature of legislative frameworks, council priorities and data quality, the inputs underpinning this analysis may change over time. Readers should refer to the most recent information and seek updated modelling if circumstances change.

Use of sensitive information

This report relies on the provision of sensitive information, the disclosure of which may prejudice commercial positions or negotiations, or inhibit the future supply of such information in a free and frank manner. It is recommended that participating councils are consulted prior to the disclosure of any information or findings in this report.

Scenario overview

+ target capital structure and key assumptions

Three scenarios have been modelled

Balanced budget (S1)

(simple aggregation)

1

- Combines starting assets and debt positions and projected opex, capex and revenue (including development contributions) for each council.
- Adjusts financial projections for one-off establishment costs (debt funded initially with recovery through charges over time) and additional operating costs.
- Incorporates agreed efficiency gains from consolidation and economic regulation.
- Targets a balanced budget (i.e., no operating surplus) and demonstrates efficiency gains only.
- Does not optimise capital structure.

Accelerated investment (S2)

(targeting increased investment, while maintaining current price paths)

2

- Utilises anticipated LGFA borrowing terms to fund higher levels of investment, consistent with principles of intergenerational equity.
- Maintains current price levels and revenues but accelerates investment in infrastructure, utilising the greater borrowing capacity and efficiencies.*
- Demonstrates how a WSCCO could increase investment without increasing costs to consumers.

Optimised prices (S3)

(targeting current investment paths, while flattening prices)

3

- Utilises anticipated LGFA borrowing terms to fund higher levels of investment, consistent with principles of intergenerational equity.
- Uses borrowing capacity* and efficiencies to lower prices while maintaining currently planned levels of investment.
- Demonstrates affordability benefits of the WSCCO model.

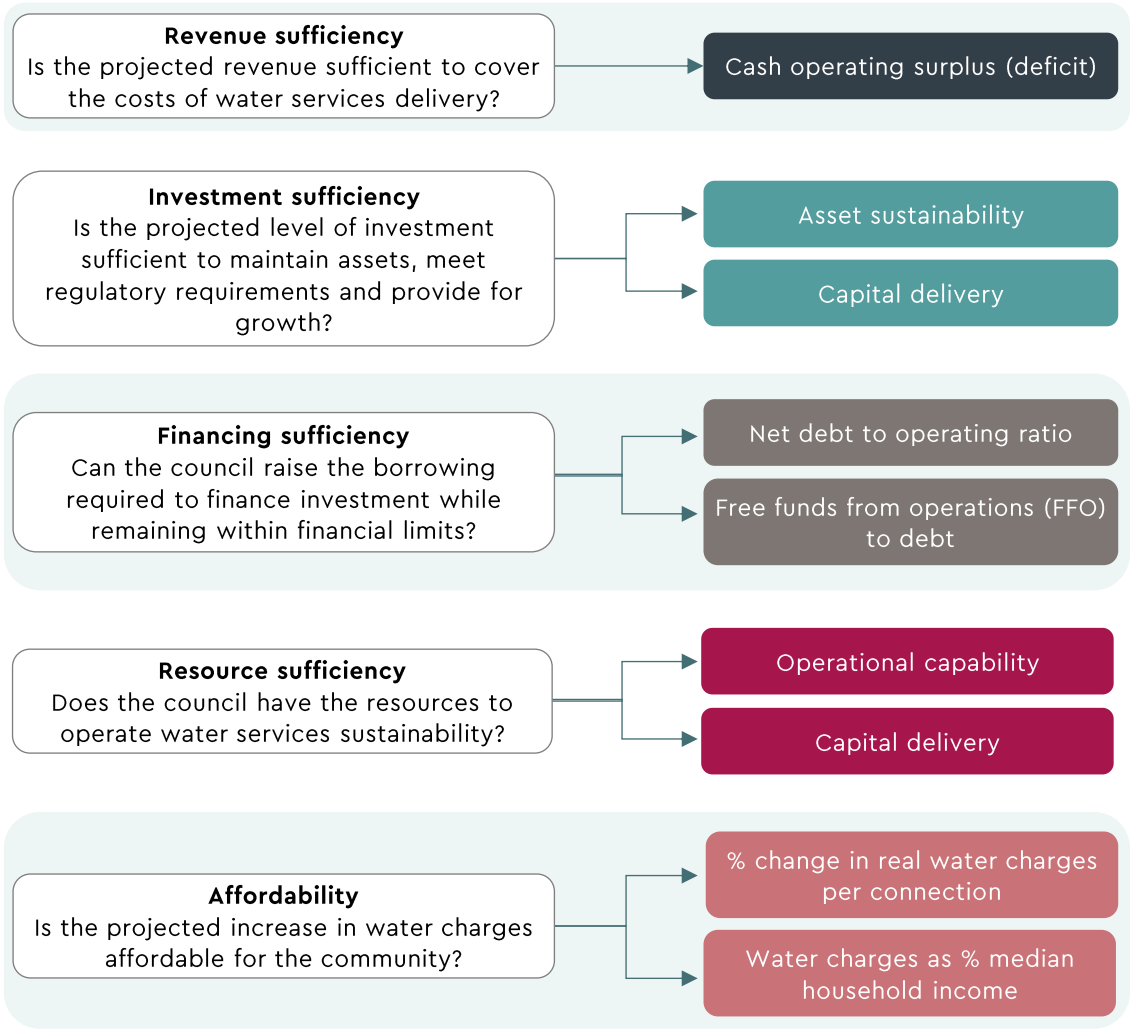
**An explanation of the target capital structure is explained overleaf*

Additional considerations:

- A status quo comparator is used as the benchmark for comparison, aggregating the financial positions supplied without adjustments or efficiency assumptions applied.
- Harmonised pricing is presented for scenario 3. An explanation of how the harmonised, and non-harmonised price paths are arrived is presented in Appendix C.

Target capital structure

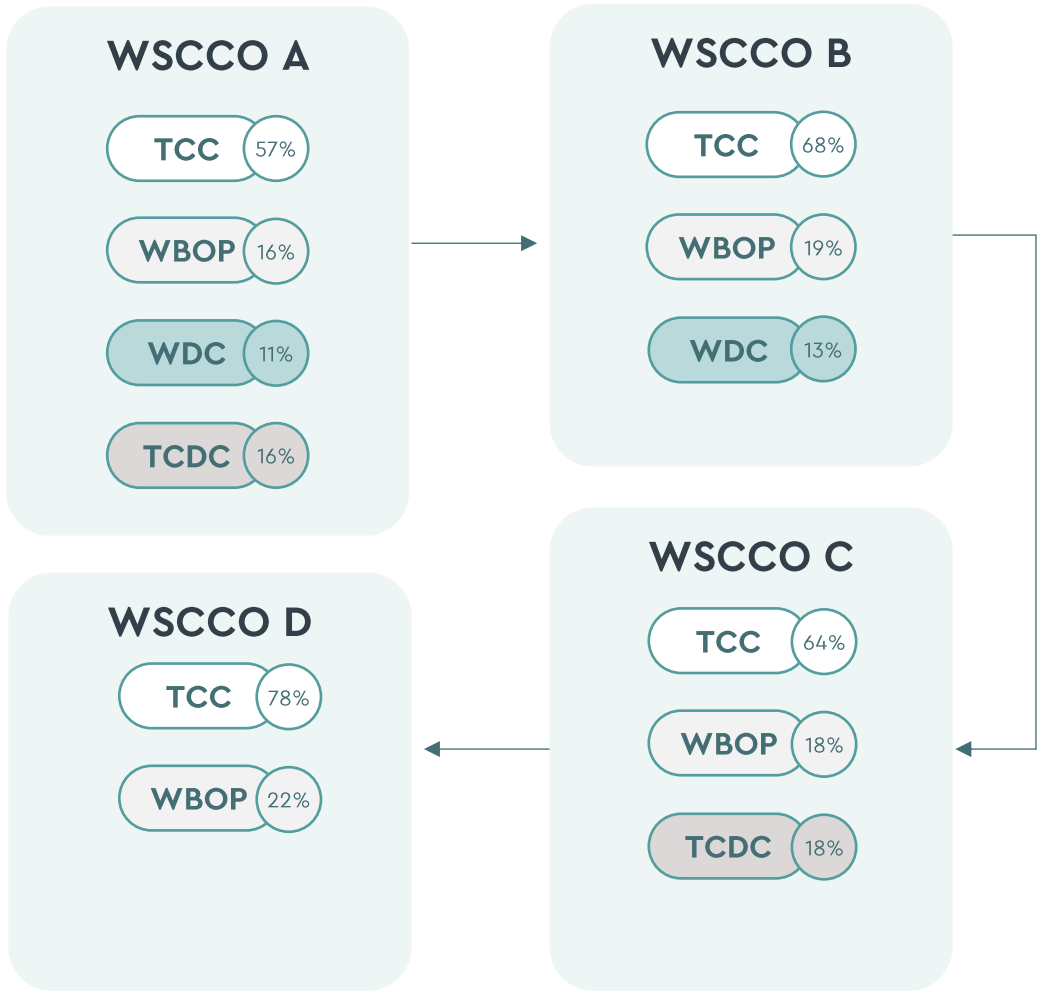
- **DIA guidance sets out key financial principles** that underpin the requirement for financial sustainability. Under Local Water Done Well, the expectation is that operating revenues pay for operating costs with capital investment funded by capital sources (e.g., borrowing and development contributions).
- **LGFA has set out a number of credit criteria.** A critical component of the 'prudent credit criteria' is that a 'funds from operations' ('FFO') to debt covenant would be required, with an **expected minimum 'FFO to debt' ratio likely to fall between 8% and 12% depending on individual circumstances for the CCO**.
- FFO to debt provides a metric by which you can assess the ability for revenues (including DCs in certain circumstances) to meet operating costs and debt servicing requirements.
- By **targeting an efficient capital structure** through a WSCCO, it is possible to **optimise revenues, expenditures and debt** that meet prudent credit criteria. This creates opportunities to:
  - **increase investment while maintaining current price levels** or
  - **maintain investment while lowering price levels** or
  - **A combination of these scenarios.**
- **Our modelling targets FFO to debt at the mid-point of 10%** as a conservative assumption. This means cash surpluses (including DCs) generated in any year are equal to 10% of the WSCCOs net borrowings.



Entity permutations

Four entity permutations have been modelled against the three scenarios.

The analysis that follows is based on WSCCO A.



The percentages indicate how costs, revenues and efficiencies would be allocated to each council. They were derived by averaging a number of measures. Further information can be found in Appendix A.

Key assumptions

Several key assumptions unpin the analysis, which are consistent across the scenarios modelled.

Additional information on the underlying assumptions and any adjustments can be found in Appendix A.

Further information on efficiencies can be found in Appendix B.

Assumption	Commentary
Operating efficiencies 1.5% – 2.0% p.a.	Operating efficiencies are driven by a number of factors, including productivity gains arising from effective management practices, purchasing power, and more streamlined operations and maintenance. Efficiencies are modelled to begin two-years after the entity's establishment (FY30) and ramp to 1.75% p.a. (the midpoint of the efficiency range) until **peak operating efficiency is achieved in FY44 (cumulative gain of 23.3% relative to the initial opex cost).**
Capital efficiencies 1.3% - 1.5% p.a.	Capital efficiencies reflect reductions in real unit costs from prudent investment decisions, streamlined cost structures and market power from a larger entity having long-term investment pipelines. They are modelled to begin two-years after the entity's establishment (FY30) and ramp to 1.4% p.a. (the midpoint of the efficiency range) until **peak capital efficiency is achieved in FY44 (cumulative gain of 20.8%).**
Inflation rates – BERL	Councils typically utilise the **BERL cost index** to inform inflation assumptions. These have been used to support the analysis in this report.
Establishment costs are capitalised	Establishment costs are assumed to be: • **$10 million for four council entity scenarios** • **$9 million for three council entity scenarios** • **$8 million for two council entity scenarios** This covers transition activities, including legal, commercial and other due diligence, and fit out of premises and basic IT hardware. ***The model is not sensitive to this assumption.***
Additional opex	Additional opex associated with a WSCCO include additional management costs, board fees, audit and other costs. **These are assumed to be around $2 million p.a.**
1 July 2027 establishment date	The entity is established from 1 July 2027.
Three waters	Water supply, wastewater and stormwater all transferred to the entity.

Key findings

WSCCO A

Key findings

By FY34, a price-optimised WSCCO could **support financially sustainable water services** while enabling **up to $638 million** in additional investment (+20% compared to the status quo) in water infrastructure and/or **reducing the cost to consumers by up to $951 on average** (-26%, relative to current price paths).

This means a **joint WSCCO** could deliver water services **at a lower cost to consumers** than individual councils under current operating models and capital structures.

A WSCCO could achieve:

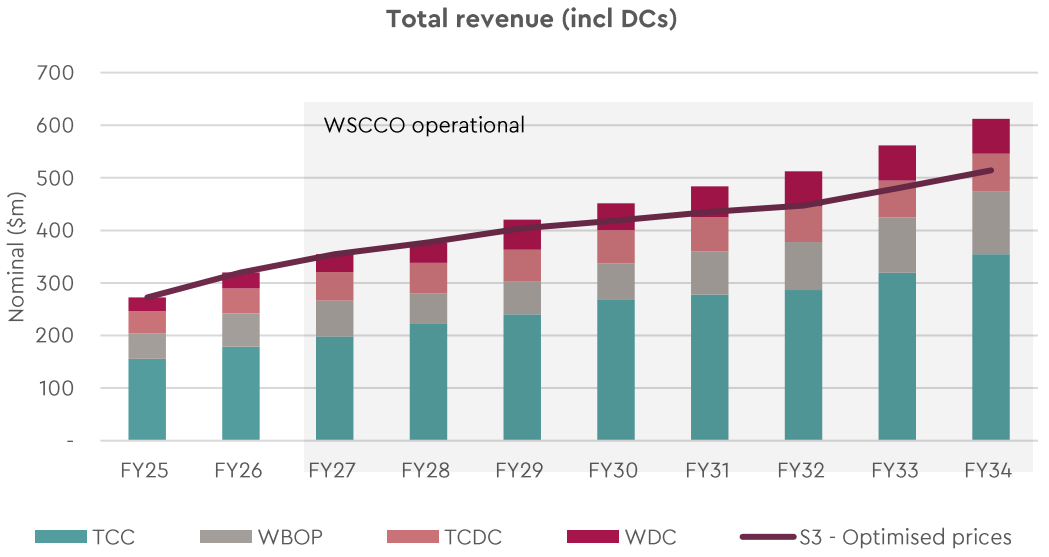
- **Operating efficiencies peak at 22.3% relative to initial opex by FY44**, and generate $17.5 million in annual savings by FY34.
- **Capital efficiencies peak at 20.8% relative to initial capex by FY44**, and generate $44.8 million in annual savings by FY34.
- **The current investment profile could be delivered for around $121 million less between entity establishment and FY34.**

This arises from using a more **efficient capital structure** and opex and capex efficiency gains to provide:

- **Immediate uplift in access to borrowing.**
- **Better cost distribution** by funding and financing assets over their useful lives.
- **Increased investment capacity** and financial flexibility.

We note the underlying price paths for councils diverge over time, meaning councils face different pricing outcomes at different points over the 10 year period, whether pricing is harmonised or not.

Scenario	Cost per connection (FY25) ($ real)	Cost per connection (FY34) ($ real)	Total capex (FY25-FY34) ($m nominal)	FY34 FFO-to-debt (incl. DCs)
S1 Balanced budget	$2,027	$2,764	$2,999	8%
S2 Accelerated investment	$2,027	$3,715	$3,759	10%
S3 Optimised prices	$2,027	$3,047	$2,999	10%
Comparator (status quo)	$2,027	$3,715	$3,120	14%

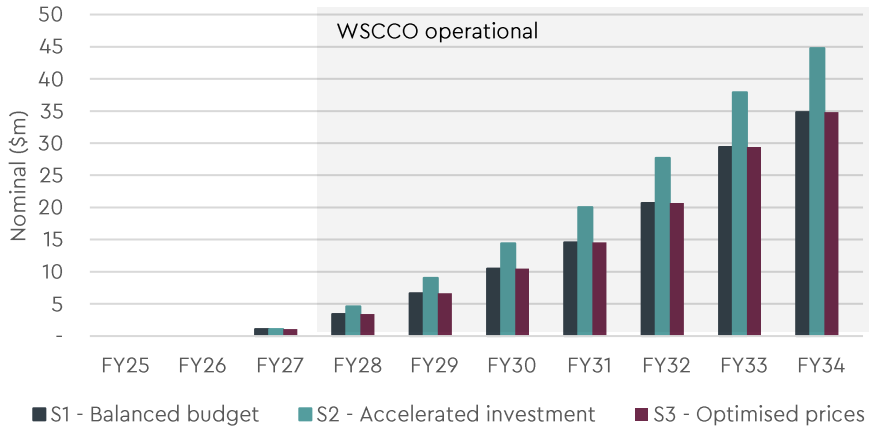


Capital expenditure

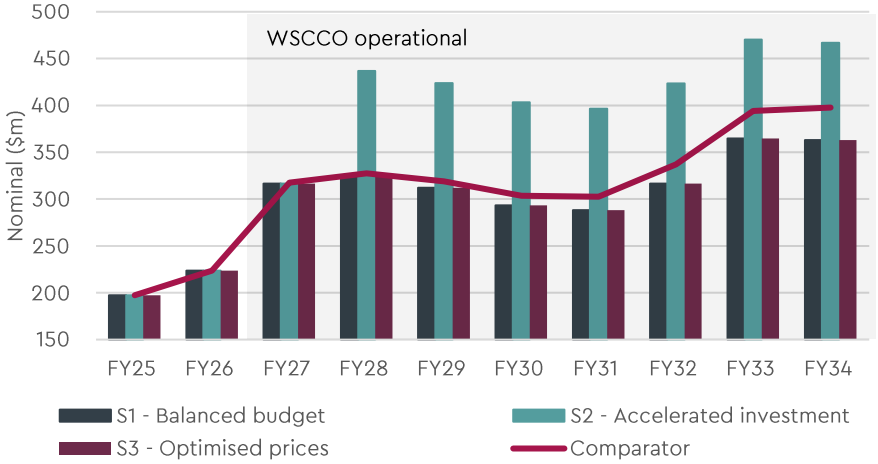
WSCCO A

Levels of investment

Capital expenditure efficiencies FY25-FY34



Capital expenditure (net of efficiencies)



Current Investment Levels

The four councils plan to invest **$3.12 billion** in water infrastructure over the next ten years, representing a significant increase over recent investment levels and, in some cases, surpassing LTP commitments for regulatory compliance.

Investment Scenarios under a WSCCO

By optimising the capital structure and achieving modest efficiencies, the WSCCO could generate **annual capital efficiencies of between $34.8 million and $44.8 million by FY34**. This would enable the delivery of the same investment for **$121 million less** than current council arrangements between entity establishment in FY27 and FY34, while also **lowering costs for consumers**. As efficiencies are phased in and permanent, benefits would be larger and continue to accumulate over time.

If the **current price path** is maintained, a WSCCO could invest an **additional $638 million** over the next decade, raising total investment to **$3.76 billion**.

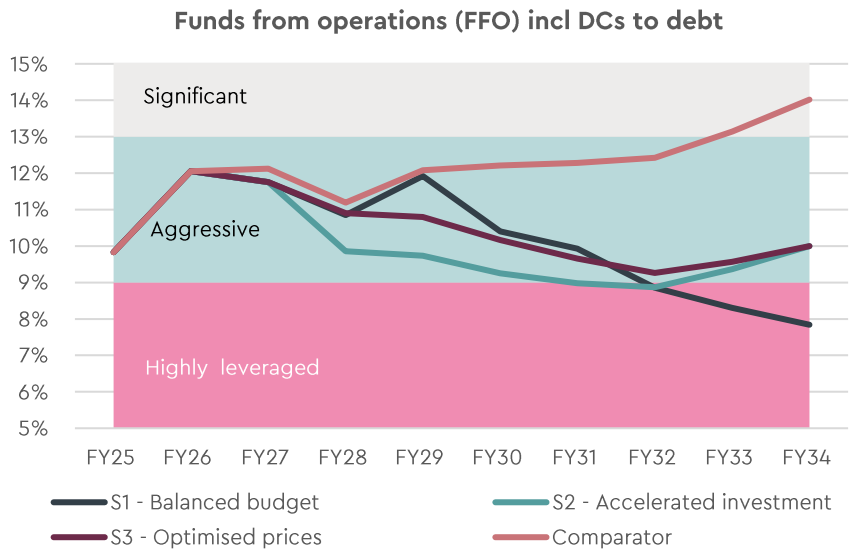
Scenario	Total capex (FY25-FY34) ($m)	Capex efficiencies p.a. (FY34) ($m)
S1 Balanced budget	$2,999	**$34.8**
S2 Accelerated investment	$3,759	**$44.8**
S3 Optimised prices	$2,999	**$34.8**
Comparator (status quo)	$3,120	**$0**

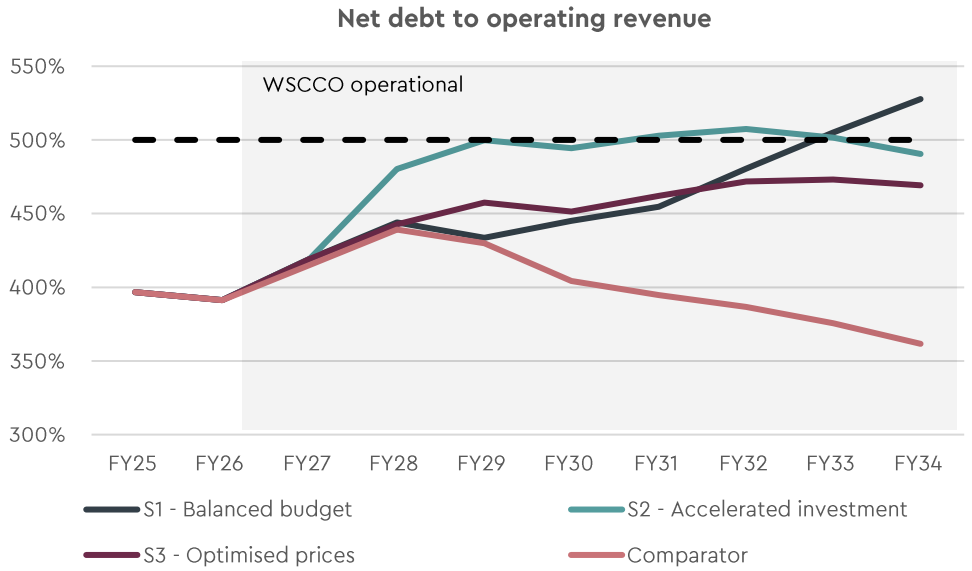
Capex efficiency	Cumulative efficiency (FY34)	Peak efficiency (FY44)
1.4% p.a.	8.8%	20.8%

Debt sustainability

WSCCO A

Debt sustainability





Borrowing for investment

Based on the information supplied, of the **$3.1 billion of water infrastructure investment projected over 10 years**, approximately:

- **$1.3 billion (42%)** is proposed to be **debt funded.**
- **$0.5 billion (16%)** is proposed to be funded through development contributions.
- **$1.3 billion (42%)** is proposed to be funded through operating revenues. This primarily comes from **depreciation funding** (funded via water charges). Depreciation expense is a non-cash operating item, with annual surpluses being retained on the balance sheet as reserves.

Capital structure

As outlined in DIA guidance, it is inefficient to fund investment in long-lived infrastructure primarily through operating revenues. Under **LWDW framework**, capital investment is expected to be funded through **capital sources** (i.e., **borrowing and development contributions**), while **operating revenues** must be sufficient to maintain debt repayments and ensure debt remains within LGFA lending limits* for water CCOs.

Scenarios 2 (accelerated investment) and 3 (optimised prices) target a FFO-to-debt ratio of 10%, the mid-point of the range indicated by the LGFA*, resulting in:

- **Higher average level of gearing of water activities.**
- **Lower long-term increases in water charges** compared to in-house service delivery options.
- **Increased levels of investment.**

**The LGFA has signalled a minimum 'FFO-to-debt' ratio of between 8% and 12%. If LGFA approved a lower FFO-to-debt ratio for the WSCCO, then this would further increase the additional investment or further reduce prices relative to the modelled scenario.*

Approaches to credit ratings

The standalone rating for water activities would be determined by the scale of the entity, the economic regulatory regime, WSCCO financial metrics and links to the parent council(s)

For regulated water utilities, the funds from operations (FFO) to debt ratio is the primary metric used.

To determine the appropriate FFO-to-debt ratio to target, we have used S&P's credit rating criteria to illustrate the ratios required for an investment grade entity. This aligns with DIA and LGFA guidance.

In the short term, uncertainty regarding the regulatory regime means higher ratios would be required to achieve an equivalent credit rating – in 5-10 years, once the economic regulatory regime is embedded, we expect WSCCOs will be assessed more favourably and the lower financial ratios apply .

The business risk assessment is expected to differ across WSCCO depending on the scale of the entity and diversity of the customer base (including geographic, economic, and regulatory foot-prints).

- For a large multi council WSCCO this is expected to result in an 'excellent' business risk profile and therefore an FFO / debt of 6-9% would be required for an investment grade rating,
- **For this analysis, a target FFO-to-debt of 10% is applied to WSCCO A. This moves the WSCCO up from the 'aggressive' to the more favorable 'significant' band, leaving a lower residual risk for participating councils.**

The above analysis considers the **standalone rating.**

We note the WSCCO **issuer credit rating may benefit from links to the council and therefore is expected to be only a few notches below council (once it is standalone investment grade).*

S&P corporate rating criteria (for a regulated water utility)

Outcome	1	2	3	4
Country risk	Low risk			
Industry risk	Very low risk			
Competitive position	Strong		Satisfactory	
Business risk	**Excellent**		**Strong**	
Financial risk	**Significant**	**Aggressive**	**Significant**	**Aggressive**
Modifier	None			
Standalone rating	**a-**	**bbb**	**bbb**	**bb+**
Government support*	**Very high***			
Issuer credit rating	**aa-**	**a**	**a**	**bbb+**

Ratio	Significant[1]	Aggressive[1]
FFO / Debt (%)	9 - 13%	6 - 9%

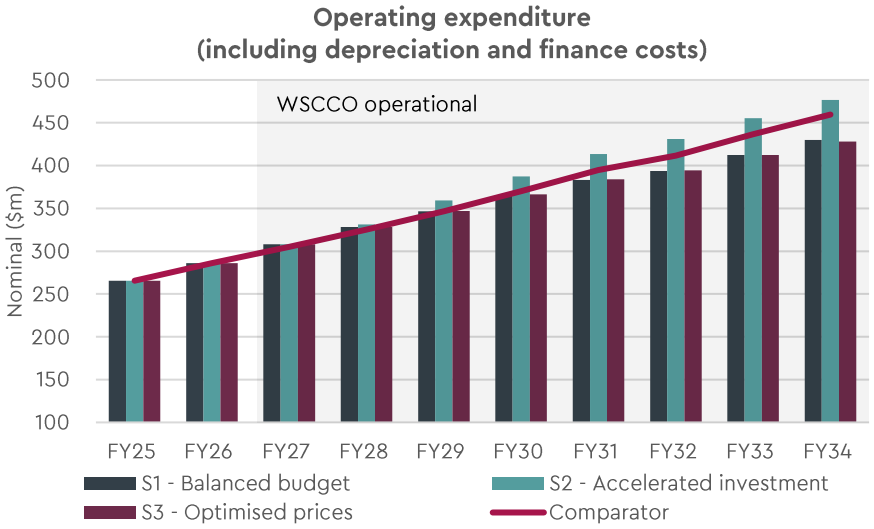
A large, regional water utility is likely to have an 'excellent' business risk profile and therefore could be in the 'aggressive' band whereas a small, rural water utility is likely to have a 'strong' business risk profile and therefore need to be in the 'significant' band to achieve an investment grade standalone rating (i.e. before any uplift for government support (e.g. from parent council(s)).

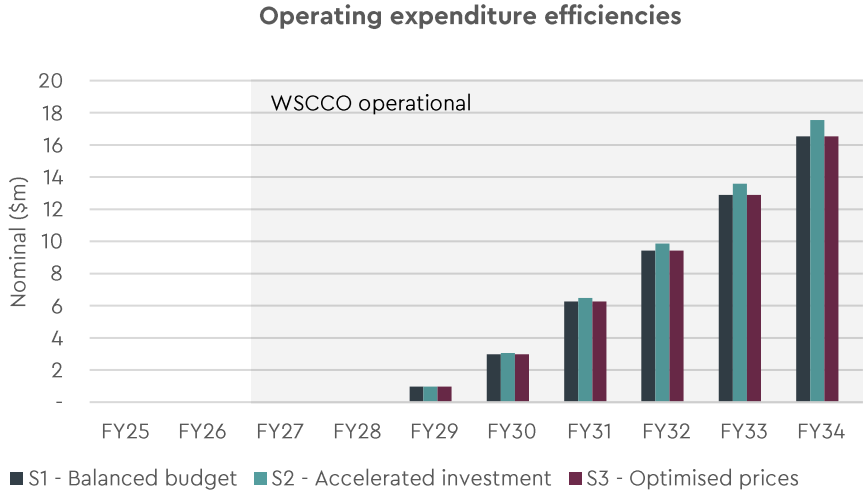
1. Assumes a 'strong' regulatory assessment applies once the regulatory regime is established and therefore the 'low volatility' metrics are applied.

Operating expenditure

WSCCO A

Projected operating expenditure





Scenario	Total opex (FY25-FY34) ($m)	Opex efficiencies p.a. (FY34) ($m)
S1 Balanced budget	$3,518	**$16.5**
S2 Accelerated investment	$3,714	**$17.5**
S3 Optimised prices	$3,519	**$16.5**
Comparator (status quo)	$3,601	**$0**

Opex efficiency	Cumulative efficiency (FY34)	Peak efficiency (FY44)
1.75% p.a.	8.4%	23.3%

Operating expenditure

Efficiency gains increase over time, with a two-year ramp-up post-establishment, and the full efficiency frontier reached 15-years thereafter. This means cost savings will **continue beyond the FY25–FY34 period modelled**, delivering ongoing benefits and savings to communities. *Operating efficiencies have been applied only to core operating costs. No efficiencies are applied to financing or depreciation costs.*

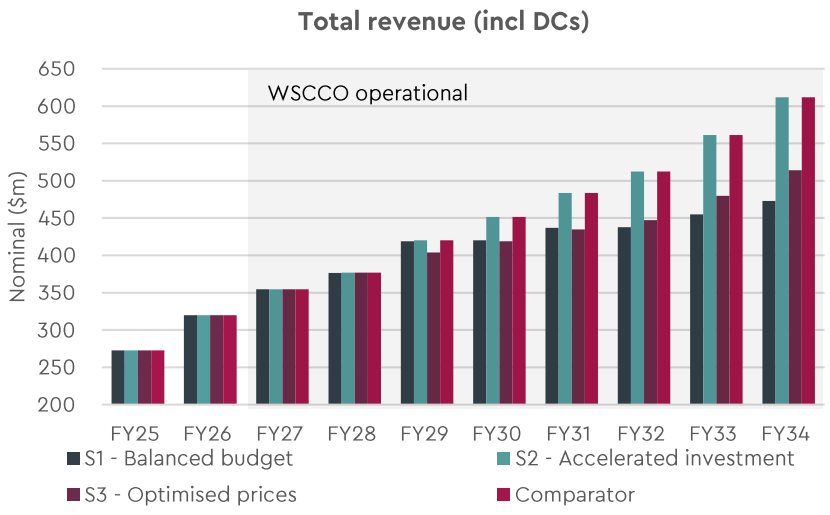
The **largest cost drivers over the forecast period** are **finance and depreciation**, accounting for approximately **half of total operating expenses**.

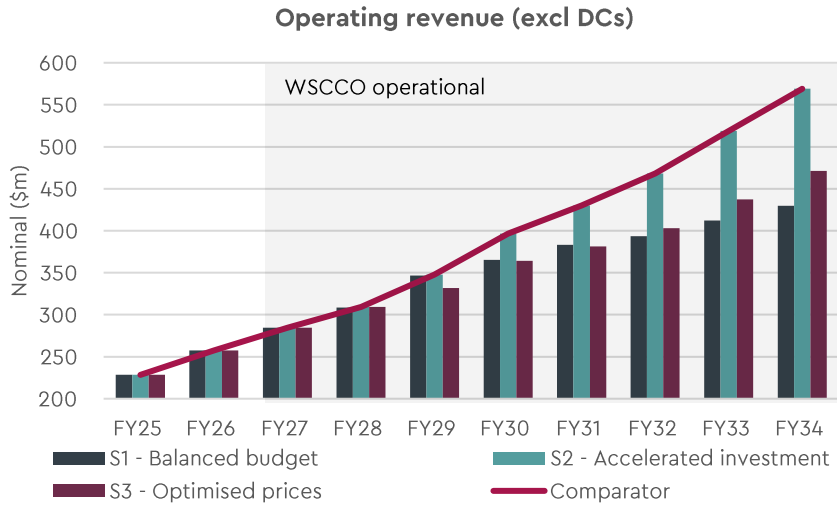
Scenario 2 provides for additional investment of up to $638 million, which drives additional **financing and depreciation costs.** This is enabled through a more **efficient capital structure**. *We have assumed this additional capex is primarily directed to improving existing assets and have not allowed for consequential opex.*

Operating revenue

WSCCO A

Projected revenues





Determining operating revenues

Under Local Water Done Well, the expectation is that operating revenues pay for operating costs with capital investment funded by capital sources (e.g., borrowing and development contributions).

This means operating revenues (and therefore charges for water services) should be set to recover all cash operating expenses plus a minimum FFO requirement (indicatively 8-12% of net debt, depending on the underlying council credit profiles).

We have adopted this approach to determine the level of revenue required, ensuring an efficient approach to setting water charges while maintaining borrowing at a prudent level.

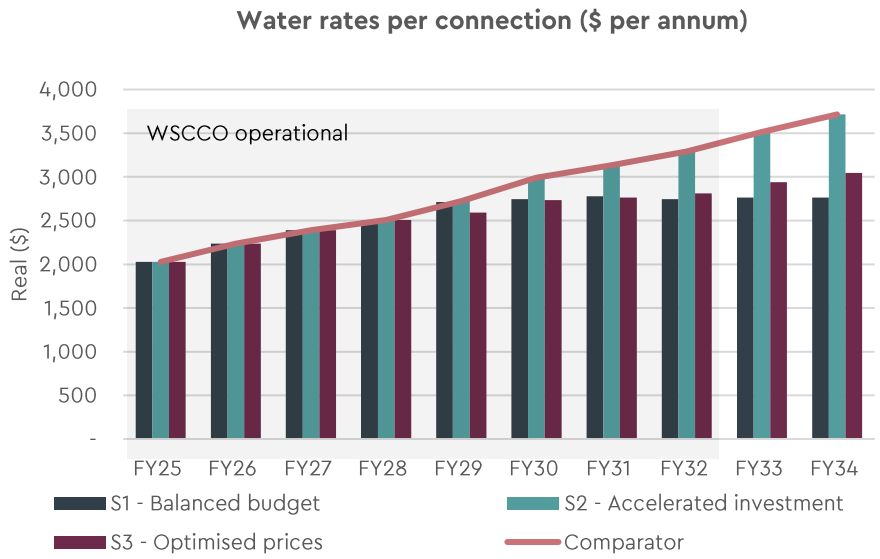
The balanced budget scenario (S1) solves for zero operating surplus, meaning it has a more aggressive FFO –to-debt profile relative to the other scenarios which target a 10% FFO-to-debt ratio. The status quo comparator operates with lower leverage (i.e., an FFO-to-debt ratio of 14%).

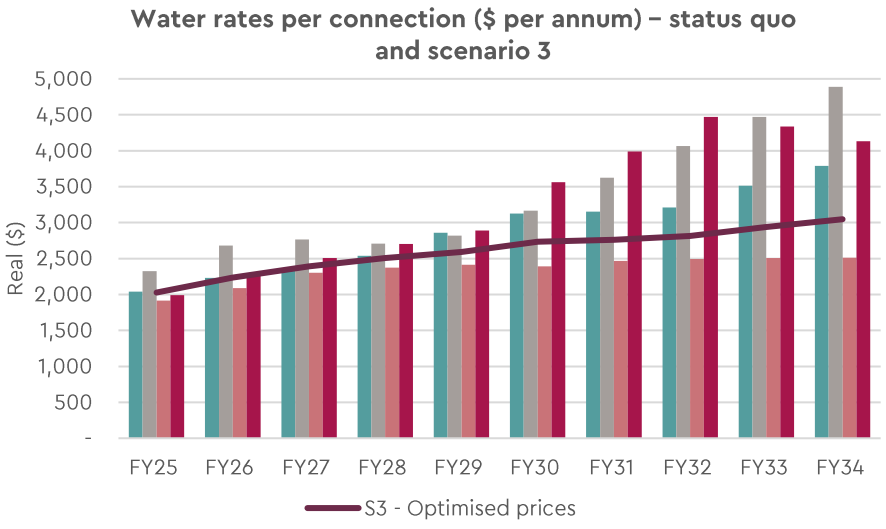
Scenario	Total revenue, incl. DCs (FY25-FY34) ($m)	FFO-to-debt(FY34)
S1 Balanced budget	$3,964	8%
S2 Accelerated investment	$4,365	10%
S3 Optimised prices	$4,022	10%
Comparator (status quo)	$4,365	14%

Cost to consumers

WSCCO A

WSCCO price path





Water charges per connection

Under current council arrangements, the average water charge per connect is projected to exceed **$3,700 per connection annually*** (in today's terms). A **WSCCO could reduce this to as low as $3,050 per connection** across the councils.

Consistent pricing methodology

This approach reflects an entity level price per connection. We note that in practice the customers will like be subject to different tariff structures as they are currently. For ease of reference, individual council price paths are provided separately and include relevant observations on harmonised and non-harmonised price paths. A explanation of the approach is found in Appendix C.

Harmonising prices means that there are consistent pricing methodologies for similar households and users across the area served by the WSCCO. Good pricing principles would likely drive the setting of these charges over time to ensure the approach reflects the long-term costs of delivering water services regardless of the specific point in time investment requirements of those communities.

Council	Savings (cumulative) to current price path - Harmonised	Savings (cumulative) to current price path - Non-harmonised
A	+ve (strongest)	+ve
B	+ve (strongest)	+ve
C	+ve	-ve
D	-ve	+ve

Appendix A: Approach to modelling

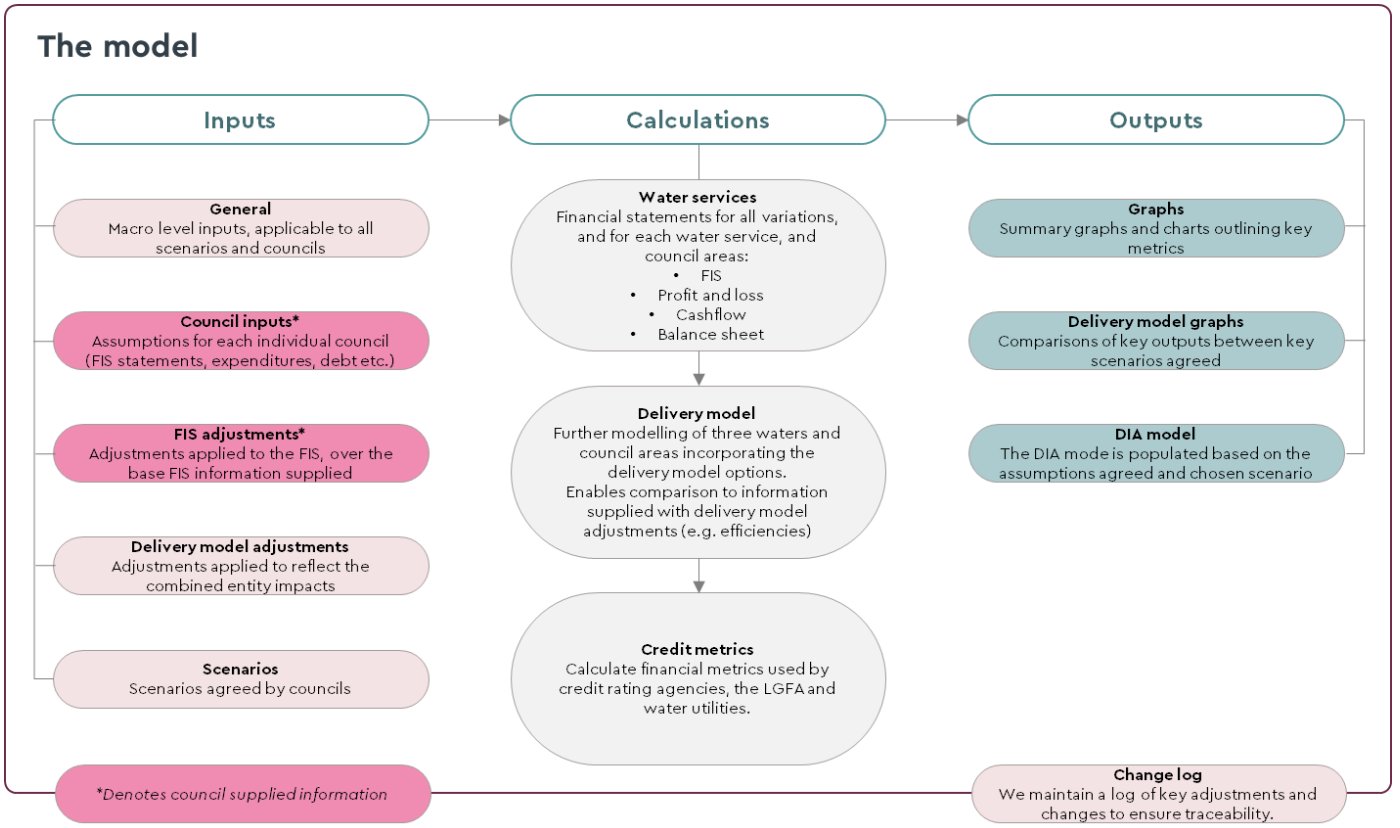
Our modelling approach

Our model builds on the Department of Internal Affairs WSDP financial template in a number ways including:

- Ability to solve for certain capital structures, financial ratios, revenue profiles and other key metrics. Testing and comparison of multiple scenarios.
- Incorporates efficiency assumptions for both capital and operating expenditure based on international benchmarks and scale of the proposed entity.
- Allows for estimated establishment costs.
- Models several key assumptions, based on evidence or information supplied by councils.

The usefulness of the model's outputs is dependent on the robustness of inputs and assumptions.

We have relied on information supplied by councils, with adjustments documented in the assumptions.



Base assumptions

Assumption	Commentary	Basis of assumption / source
Financing	LGFA has indicated that for multi-council CCOs the borrowing margin would be based on the weighted average borrowing margin of the participating councils. Default weighting will be based on ownership structure per LGFA guidance.	LGFA
Inflation	Each Council will have created their FIS with potentially different inflation rates. We rely on nominal inputs and do not attempt to normalise. We will present nominal and real figures for capital and operating spend.	BERL LGCI
Governance costs	WSCCOs will have a board of directors. We have assumed that the board will be comprised of **5 members**, with the following assumptions: • **Chair = $108,000 pa** • **Other board members = $54,000 pa** • **Meeting costs = $10,000 pa**	Watercare Services Limited (base)
Management costs	• **CEO = $400,000 pa** • **CFO = $300,000 pa** • **Other management costs are assumed to be captured within existing opex figures**	Relative to council salaries
Establishment costs (one-off)	Establishment costs are assumed to be: • **$10 million for four council entity scenarios** • **$9 million for three council entity scenarios** • **$8 million for two council entity scenarios** This covers transition activities, including legal, commercial and other due diligence, and fit out of premises and basic IT hardware. IT investment may not be fully captured. ***The model is not sensitive to this assumption.***	*Note: We assume that operating costs associated with establishment will be capitalised.*
Stormwater	Stormwater has been included for the purposes of the modelling.	
Levies	Commerce Commission (estimated $362,000) and Taumata Arowai (estimated $1.15m) levies will be built into the base case.	Commerce Commission and Taumata Arowai + population statistics
Optional price harmonisation	For the testing of price harmonisation, scenario 3 is used, with price harmonisation being phased in from FY27 to FY34 as a representative analysis.	Agreed by councils
Establishment date	The joint WSCCO is operational from 1 July 2026 (FY27), with all councils joining at the same time.	Agreed by councils

Base assumptions (allocations)

Assumption	Commentary
Allocation of efficiencies, costs and revenues (non-harmonised)	Adjustments possible through the following → • Asset value (book or replacement value) • Connections • Population • Share of revenue • Share of opex Efficiencies have been allocated using an average of each of the options identified above. **Table one**, below sets outs the relative weightings of each measure to the participating councils.

Table one: Allocation methodologies

Allocation methodology (WSCCO A)	WBOP	TCC	WDC	TCDC
Total connections	15%	55%	10%	20%
Population	20%	55%	13%	12%
Operating revenue	16%	55%	11%	18%
Operating expenditure	17%	56%	11%	16%
Asset book value	13%	64%	8%	15%
Asset replacement value	14%	56%	12%	18%
Average	**16%**	**57%**	**11%**	**16%**

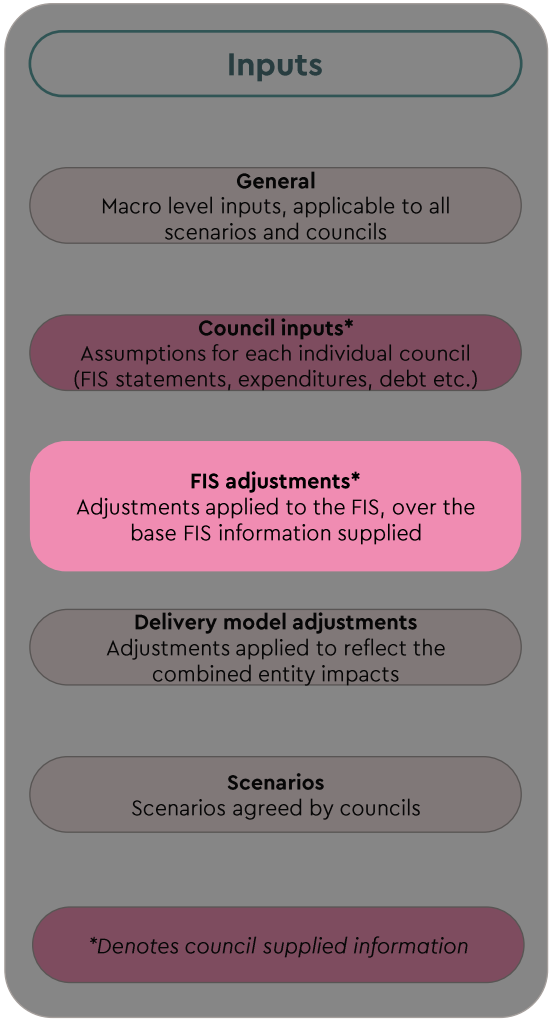
Efficiency assumptions

We have examined international experience where water utilities have been merged into larger public entities. Evidence suggests that efficiencies are largely driven by scale and the agglomeration benefits of a metro. For the proposed WBOP WSCCO, we have **applied the mid-point of** the following:

Composition	TCC + WBOP	TCC + WBOP + WDC	TCC + WBOP + TCDC	TCC + WBOP + WDC + TCDC
Characteristics				
No. of councils	2	3	3	4
Population (2023 census)	209,028	246,177	241,023	278,172
Proposed assumptions				
Opex efficiencies p.a.	1.2% - 1.4%	1.3% - 1.5%	1.3% - 1.5%	1.5% – 2.0%
Capex efficiencies p.a.	1.0% - 1.3%	1.1% - 1.4%	1.1% - 1.4%	1.3% - 1.5%
Commentary	Consistent with prior advice to TCC.	The addition of WDC offers marginal scope for operational efficiencies and capex efficiencies.	The addition of TCDC offers marginal scope for operational efficiencies and capex efficiencies.	Larger scale and concentrated urban area (TCC + WBOP) offer greatest scope for operating efficiencies. Capex efficiencies relatively higher due to larger asset base and procurement pipeline.

The above efficiencies represent a MartinJenkins view of reasonable efficiency assumptions that could be applied to support financial assessment of alternative options. The assumption should be applied on a compound (diminishing rate) basis from year-2 onwards. Note the above estimates apply after adding incremental establishment or operating costs.

Main adjustments to data provided



Whakatāne District Council

- Changes to the LTP capital programme based on data provided by the council (from Tonkin & Taylor) to ensure capex projections meet LWDW requirements for compliance with regulatory requirements.
  - The additional capex is debt funded with corresponding increases in interest and depreciation costs.
  - Consequential opex information supplied by WDC has also been included.
  - The revenue path for WDC was adjusted to support this new capex. It was adjusted to maintain water debt at 450% debt-to-revenue.

Thames Coromandel District Council

- Adjustment to household income data to reflect non-resident ratepayers (holiday homes) and older demographics (fixed incomes). This is consistent with TCDC's practices.

Tauranga City Council

- No adjustments have been made to data supplied by TCC.

Western Bay of Plenty District Council

- No adjustments have been made following updates to "Alternative Revenue" scenario modelling. This is consistent with updated data that has also been provided to DIA.

Appendix B: Additional information on efficiencies

We have had to make assumptions regarding the policy and regulatory environment (including economic regulation) and quality of governance and management given their critical impact on potential realisable efficiency gains

What efficiencies are gained by moving to professional Boards but with sole council ownership?

International water reform has tended to involve a combination of legislative reform, improved quality and economic regulation, corporatisation and professionalisation of governance, aggregation or amalgamation of service delivery and, in some cases, privatisation. As a result, it is very difficult to disentangle the impact of any one element from other changes.

We consider corporatisation and professional Boards provide an opportunity to improve governance and management, when supported by appropriate institutional and regulatory frameworks. Professional Boards alone, as demonstrated by entities like Wellington Water Limited, are insufficient to drive high-performance improved efficiency. A key differentiator is having Boards empowered with integrated oversight of investment, pricing, and financing decisions, and subject to economic regulation. This alignment of decision-making responsibilities with asset stewardship creates stronger incentives for effective and efficient operations than a professional Board operating with limited decision-making scope.

The assumption of improved governance and strategic focus is reflected in all scenarios being analysed. However, evidence clearly suggests that stronger corporate governance alone is insufficient to realise significant efficiency benefits without being coupled with clear strategic priorities, a service delivery model that provides appropriate incentives for the Board, and a strong-form economic regulation.

We have assessed efficiency on the basis that corporate structure, council performance and clear policy priorities are not compromising factors.

We have had to make assumptions regarding the policy and regulatory environment (including economic regulation) and quality of governance and management given their critical impact on potential realisable efficiency gains

The role of the economic regulator is yet to be determined, and this may have an impact on efficiency realisation.

Separate water CCOs can expect more focused attention from future regulators, with structural separation supporting greater transparency and accountability for delivery. However, given the costs of customized, entity-specific regulation, this is likely to be reserved for a small subset of the largest entities.

A key question is the extent of attention a water CCO gets under the future economic regulatory regime, and the degree of customisation to the entity's particular circumstances. This is an unknown as there is limited information currently on the approach the Commerce Commission will take, and the threshold for when they will move from an Information Disclosure regime to stronger forms of regulation (e.g., Price-Quality regulation). However, we know that Watercare will be subject to a price-quality path from 1 July 2025 under an interim regulatory scheme and is expected to transition to price-quality regulation under the enduring regulatory framework.

There are two plausible scenarios here:

1. Most water services providers (including inhouse council business units) are subject to information disclosure-only, with only the largest metropolitan CCOs subject to a stronger form of regulation

2. All inhouse council business units are subject to ID-only, with all independent water CCOs subject to some form of stronger regulation (see for example the PREMO model in Victoria).

Evidence base to support efficiency assumptions

Significant improvements in efficiency have been achieved in overseas jurisdictions that have pursued reform of a similar nature to that proposed in New Zealand. For example:

Productivity Commission

- In Australia, the Productivity Commission found that service delivery reform has helped to improve efficiency and deliver significant benefits for water users and communities. National Water Reform - Draft Report (pc.gov.au)

Frontier Economics

- In its review of the experience with water services aggregation in Australia, Great Britain, Ireland and New Zealand (Auckland) finds that there is "strong and consistent evidence" that reforms have led to significant improvements in productivity and efficiency. Review of experience with aggregation in the water sector (dia.govt.nz)

FarrierSwier

- In its review of WICS methodology, FarrierSwier commented on the potential that exists for efficiency gains from amalgamating water services in New Zealand and notes significant improvements are possible through aggregation and associated reforms, including improving the ability to attract and retain skilled management and staff, more effective procurement functions, asset level optimisation and reduction in corporate overheads and duplicative functions. Farrierswier - Three Waters Reform Programme - Review of WICS methodology and assumptions underpinning economic analysis of aggregation - 2 May 2021 (dia.govt.nz)
- In an independent review of the Essential Services Commission's PREMO regulatory model in Victoria, Australia, FarrierSwier found that water companies set efficiency targets through its 2018 Price Review ranging from 1.0% p.a. to 2.7% p.a. (averaging 1.8% p.a. across 15 regulated water authorities). While all but two companies delivered reductions in controllable opex per connection, the actual opex savings reported were lower than the target (ranging from 2.2% to -0.2% and average 0.9% p.a.) Victoria's water sector: The PREMO model for economic regulation

WICS

- WICS reports that Scottish Water has been able to reduce its operating costs by over 50% since reform, while improving levels of service to customers and absorbing the new operating costs associated with its investment programme. WICS Supporting Material 2 - scope for efficiency (dia.govt.nz)

UK Water Trade Association

- A report for the United Kingdom water trade association found that reform of the water industry in England resulted in annual productivity growth of 2.1% or 64% over 24 years when adjusted for service quality improvements. Water-UK-Frontier-Productivity.pdf

The Victorian model is a strong example of driving greater focus on customer, and driving cost efficiencies and reducing customer bills

In the mid-1990s, Victoria's water industry underwent significant restructuring. The provision of water services was largely corporatised, so that over 80 water providers became 20. This reform had an impact on the price consumers pay for water, as well as the terms of service delivery. As part of the restructuring process (in conjunction with the privatisation of the energy industry), the Kennett Government established the Office of the Regulator-General, which later became the ESC. On 1 January 2004, the ESC became the economic regulator for all water businesses in Victoria.

In the State of Victoria in Australia, the Essential Services Commission makes individual price determinations using its PREMO framework for four metropolitan water businesses (South East Water, Yarra Valley Water, Greater Western Water, Melbourne Water) and 11 regional urban water authorities (Barwon Water, Central Highlands Water, Coliban Water, East Gippsland Water, Gippsland Water, Goulburn Valley Water, Lower Murray Water (urban), North East Water, South Gippsland Water, Wannon Water and Westernport Water). These entities range in size, from 20,000 customers (Westernport Water) to 2 million customers (Yarra Valley Water).

There is strong evidence that regulation under the PREMO regime, combined with well governed and managed water businesses, led to a much greater focus on their customers and improved customer outcomes (see two independent reviews by FarrierSwier of the PREMO model on the Essential Service Commission's website). Under the PREMO framework, water businesses are required by the regulator to commit to a range of customer outcomes and associated performance measures and targets as part of their price submissions.

The PREMO model in Victoria has been effective in incentivising water businesses to pursue cost efficiencies and minimise prices for customers. Water businesses' opex efficiency improvement targets averaged 1.3% in the 2023 price review. This is lower than the 1.8% average opex efficiency hurdle in the 2018 price review, but higher than the standard 1.0% rate the commission applied prior to the introduction of PREMO.

The lower efficiency hurdles in the 2023 price reviews reflects the view that Victorian water businesses are now operating close to the 'efficient frontier' following years of regulation.

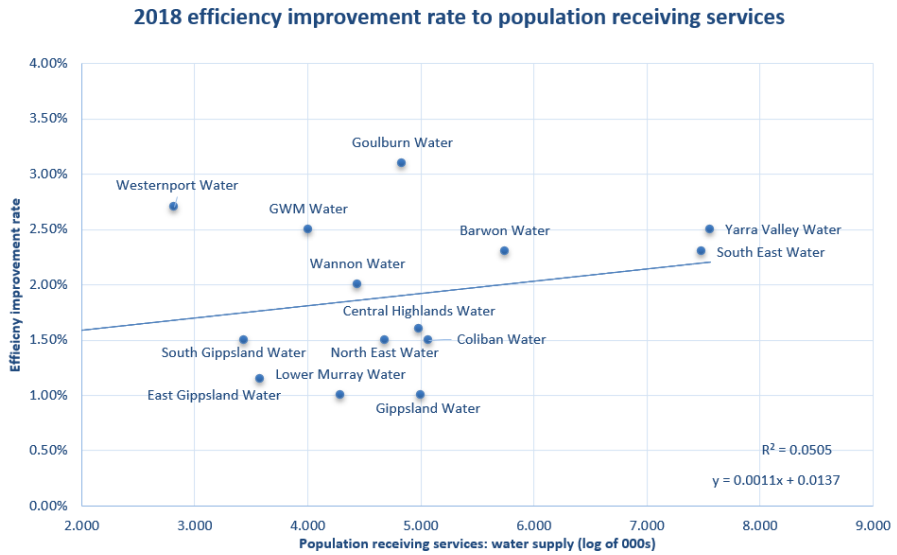
Analysis of Victorian utilities demonstrates potential deliverable efficiencies may improve with scale

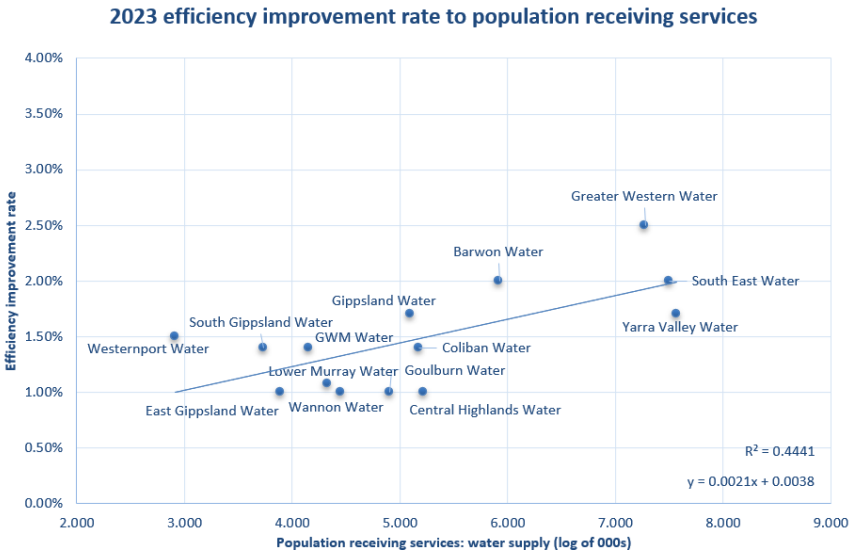
While actual performance data across Victorian utilities is limited and inconsistent (discussed overleaf), analysis of regulatory efficiency targets (hurdles) provides valuable insights into the relationship between scale and expected improvements.

We have analysed the efficiency improvement hurdle imposed by or agreed with the Essential Services Commission in Victoria for each of the price reviews in 2018 and 2023 against scale (measured by population served).

The analysis highlights a clear relationship in the 2023 price review where larger entities were set a higher efficiency improvement hurdle for the ensuing five years. Larger entities were set efficiency hurdles of 1.5 – 2.5% per annum despite already being regulated for over 15 years.

The relationship in the 2018 price review is less clear (largely driven by a number of smaller entities with efficiency improvement hurdles of 2.5 – 3.0%), reflective of a greater weighting on industry-wide catch-up efficiency. The larger entities in this price review were still set efficiency targets of approximately 2.5% per annum for the ensuing 5 years. We also note that most entities serving 200,000 or less population (5.3 on X-axis) were set targets of 1 – 1.5% in both price reviews.





Source: Essential Services Commission, Victoria Water Price Reviews 2018 and 2023

The Australian national performance report does not measure efficiency however average operating expenditure per property can be analysed

This analysis captures all Australian water utilities however does not track actual efficiency improvement and as such is only intended to be used for verification rather than in determining the efficiency opportunity purposes. We note that inferences from this data should be undertaken with caution given the limited sample size in each category (shown below graph) and the numerous factors influencing operating costs per property. External variables such as geographic dispersion, water sources, treatment requirements, growth impacts and infrastructure delivery methods make comparisons challenging (despite averaging approach).

Operating costs vary significantly by utility size

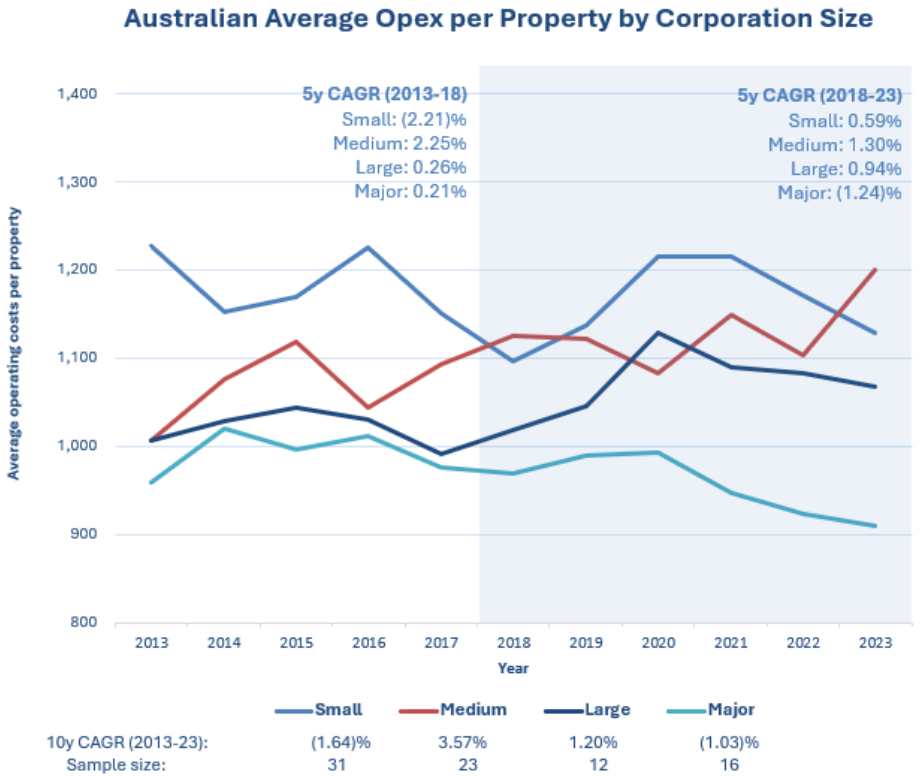
Major utilities (100,000 plus connections) consistently demonstrate the lowest operating costs per property (around $900–1,000) likely partly due to economies of scale as well as higher density.

10-year horizon highlights benefit of scale

Major utilities annualised growth over the period 2013 – 2023 outperformed large and medium utilities by 2.2% and 4.6% respectively. Small utilities average operating cost per property reduced by more than the major utilities however off a substantially higher base.

Dataset highlights variability over time

We note there are limited differences between medium, larger and major utility cost per property changes in the first five-year period (2013 – 2018) with all of the differential occurring in the second five-year period (2018 – 2023). The small utility dataset shows an irregular pattern over time.



Source: Urban NPR Dataset 2023
Note: four outliers with extreme operating costs per property have been removed from the Small utility group dataset.
Note: CAGR stands for 'Compound Annual Growth Rate', which is the cumulative average annual growth rate over the period.

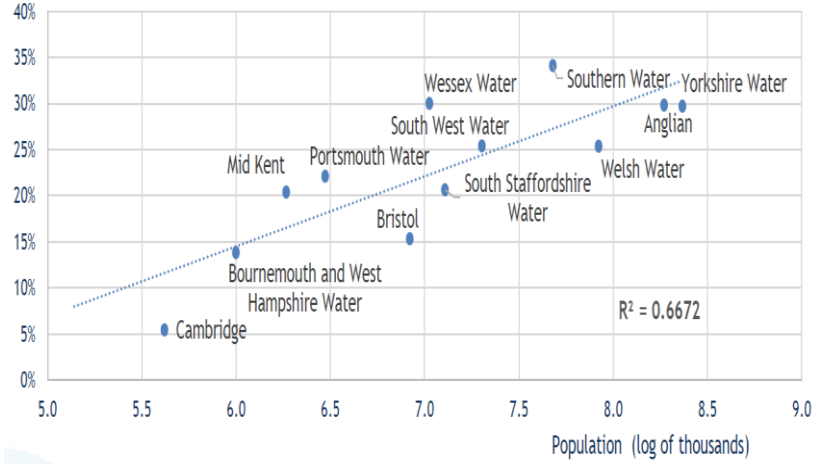
Small	Medium	Large	Major
Less than 20,000 connected properties	Between 20,000 and 50,000 connections	Between 50,000 and 100,000 connections	Over 100,000 connections

WICS compared efficiency for different scale UK water utilities following corporatisation, and used this to inform estimates for NZ councils

Water Industry Commission for Scotland (WICS) undertook analysis of the observed operating efficiency improvement for the different UK entities over a six-year period commencing with corporatisation (between 1994 and 1996) relative to the population served. In terms of quantifying the gains, the evidence indicates a non-linear relationship between scale (measured as population size or number of connections) and potential efficiency (see graph below). The WICS models are based on models developed by Ofwat and have been in use for 20+ years in England, Wales and Scotland.

There are diminishing returns to scale, with maximum scale reached with a connected customer base of 600,000-800,000. For councils below 60-70,000 population there is minimal scope for efficiency gains. This is consistent with management theory, whereby small entities are unable to achieve high levels of asset management maturity, procurement gains etc. WICS utilised the below to estimate efficiency gains for different scales of entity. WICS reduced the potential efficiency gains by a factor of 5 for scenarios where economic regulation, strong corporate governance and clear policy objectives were considered not present.

WICS calculated improvement in efficiency (over 6-year period following corporatisation) for UK water utilities and assessed catch-up potential for NZ



Council Area	LGNZ classification	Population served (thous)	Log of population	Assessed catch-up based on observed experience
Auckland	Metro	1,758	7.47	100%
Christchurch	Metro	385	5.95	55.1%
Wellington City	Metro	223	5.41	38.9%
Hamilton	Metro	162	5.09	29.6%
Tauranga	Metro	143	4.97	25.9%
Dunedin	Metro	121	4.80	21.0%
Palmerston North	Metro	89	4.49	11.8%
New Plymouth	Provincial	64	4.16	2.0%
Hastings	Provincial	64	4.15	1.9%
Upper Hutt	Metro	63	4.14	1.6%
Rotorua Lakes	Provincial	62	4.13	1.3%
All other Councils		<60	4.1	0%

Source: Water Industry Commission for Scotland

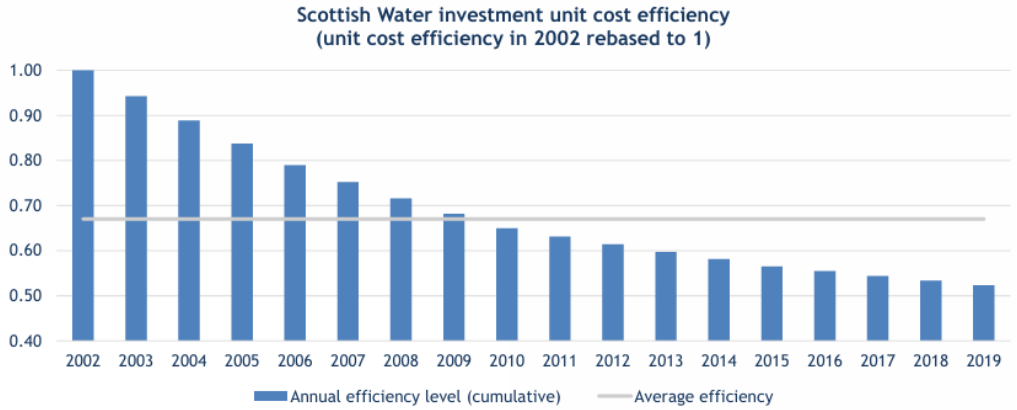
The table above shows the estimated potential efficiency improvement (%) that each NZ council could achieve relative to Watercare (i.e., New Zealand's most efficient water company), based on the observed efficiency improvements of similar-sized UK water utilities in their first 6 years following corporatisation.

The capital efficiency evidence base is less robust due to information scarcity. WICS utilised the capital efficiency achieved in Scotland reforms to estimate potential efficiency deliverable in NZ

There is limited international information readily available that enables a robust estimate of the potential capital efficiency gains possible from water reform in New Zealand. This reflects a lack of investment unit cost efficiency reporting which is necessary to ensure capital efficiency can be identified (as opposed to capital expenditure deferral or other driving factors).

WICS are the economic regulator for Scottish Water under a detailed and comprehensive economic regulation model. As such WICS have a detailed understanding of the Scottish Water investment unit cost efficiency over time. This information is presented below and highlights that as a result of reform, Scottish Water achieved approximately 45-50% lower capital expenditure unit costs between 2002-2019. WICS also noted that Scottish Water had recently committed to achieving further 0.75% real improvements in capital expenditure unit costs annually until 2040 suggesting significant further long-term efficiency gains were possible.

WICS considered that under the previous NZ water reform model (including necessary scale, professionalisation of Boards / governance and strong-form economic regulation) that NZ entities could achieve similar improvements. WICS worked closely with Watercare (and other councils) to understand potential differences between NZ and Scotland that would limit the potential capital efficiency achievable and edit efficiency targets to account for these differences.



Source: Water Industry Commission for Scotland

FarrierSwier in reviewing the WICS approach noted that:

- While this represents a reasonable starting point the analysis suffers from several limitations, including that Scottish Water's experience could differ markedly from what may be achievable in New Zealand.
- The top-down efficiency assumption was also not adjusted to account for differences between Scotland and New Zealand in key expenditure drivers, potential for asset optimisation and any other driving factors.
- Without such adjustments or comparison to other case studies, it is hard to say whether the Scottish Water experience is a reasonable guide for what is achievable in New Zealand.

As such we believe it is prudent to use a significantly more conservative capital efficiency assumption (relative to WICS) and vary this less with increasing scale.

Appendix C: Approach to price paths

Harmonised and non-harmonised price paths

Approach to price paths

The councils jointly agreed to model three scenarios based on an agreed set of assumptions including:

- Efficiency gains for operating and capital spend
- A capital structure based on a target FFO:debt ratio of 10% (the mid-point of LGFA's guidance).

It was agreed that modelling should demonstrate the differences in price paths for each participating council, based on the above assumptions, for both a harmonised and non-harmonised price path, with both alternatives compared to the standalone price path implied in the data supplied by each council, post adjustments. This is tested against scenario 3 (optimised prices).

Determining a non-harmonised price path

1. The model takes the initial debt, revenues, and expenditures for each constituent council, effectively ringfencing borrowing, revenues, and expenditures.

2. Establishment costs and ongoing incremental costs are allocated back to each council using the agreed basis for apportionment. E.G. If the costs are $10 million, and Council A's apportionment is 20%, then $2 million is allocated to Council A.

3. Entity level efficiency assumptions are applied each individual council's forecast opex and capex projections.

4. In summary, the net cashflow impact of the establishment and incremental costs are allocated back to each council's starting operating and debt positions. The price path for each council is then recalculated by solving, at the council level, for the revenues required to maintain the FFO-to-debt ratio at 10%. **Note, this calculation is performed for each council, resulting in varying revenue per connection at council level.**

This approach has the effect of sharing the net benefits of efficiency savings with each district, by lowering prices relative to their standalone price path, but does not result in cost-sharing between districts.

Determining a harmonised price path

1. The model combines the initial debt and projections of revenues and expenditures into an aggregate CCO view.

2. Establishment costs and ongoing incremental costs are added to the CCO's starting debt position and forward opex projections, with efficiencies applied to forecast opex and capex projections to reduce the WSCCO's cash outgoings.

3. The net cashflow impact of these changes is incorporated within the aggregate WSCCO cashflow projections (i.e., they do not sheet back to individual districts).

4. The price path for the WSCCO is determined by solving for revenues required to maintain FFO-to-debt ratio at 10%. **Note, this calculation is performed at the WSCCO level. Revenues are then allocated to each district according to the number of connections,** resulting in each district having and equivalent revenue per connection .

This approach basis has the effect of sharing debt, revenues and costs between districts (noting that, net of efficiencies, most customers are likely to be better off relative to the standalone position once benefits are accounted for).