Comparison of water delivery models

Invercargill City Council

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Introduction

Morrison Low was commissioned to assist Invercargill City Council (ICC / Council) with the development of strategic objectives, financial modelling, and a multi criteria analysis of the future water service delivery options available to Council.

This work builds on work previously undertaken for the Otago Southland Local Water Done Well Working Group (the Working Group), and references elements of that work.

Financial modelling undertaken to support this work has been completed using the same approach as that adopted for the Working Group, and therefore provides a high level of consistency with that work. This report should be read in tandem with the report completed for the Working Group. We have identified where assumptions made in this work differ from those used in the work completed for the Working Group.

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

The initial MCA analysis that was completed did not include financial modelling of a Southland Wide Council Controlled Organisation (CCO) with or without a phased introduction of regional pricing, or an Otago Southland Wide CCO with a phased introduction of regional pricing. These options have been subsequently added.

As a result, this report has a greater focus on "Option 1 – Council Operated Enhanced Service" and "Option 2 – Invercargill CCO" as these were the previously shortlisted options.

Summary

The results of the multi criteria analysis and financial modelling indicate that:

- The options of a Council Operated Enhanced Service, an Invercargill CCO, and an Otago Southland Wide CCO with phased introduction of a region-wide price, have the highest scores in the Multi-Criteria analysis under the base case.
- A Council Operated Enhanced Service is likely to result in the lowest three waters charges for consumers in Invercargill City over the long term.
- An Otago Southland Wide CCO with phased introduction of a region-wide price could have the lowest household water charges of all models through to 2034, however this option is unlikely to be viable as it requires participation of Dunedin City Council and Queenstown Lakes District Council.
- An Invercargill CCO is likely to result in higher three waters charges for consumers in Invercargill City than the Council Operated Enhanced Service.

Notwithstanding the above, it is noted that:

- Modelling of a "phased introduction of region-wide prices" assumes prices are not regionalised for a period of 5 years, followed by a 7 year transition period. Under this approach, an Otago Southland Wide CCO or a Southland Wide CCO could have lower household charges for ICC ratepayers through to 2034. However, it should be noted that there are a number of practical limitations for this model, including the need to include Dunedin City Council and Queenstown Lakes District Council.

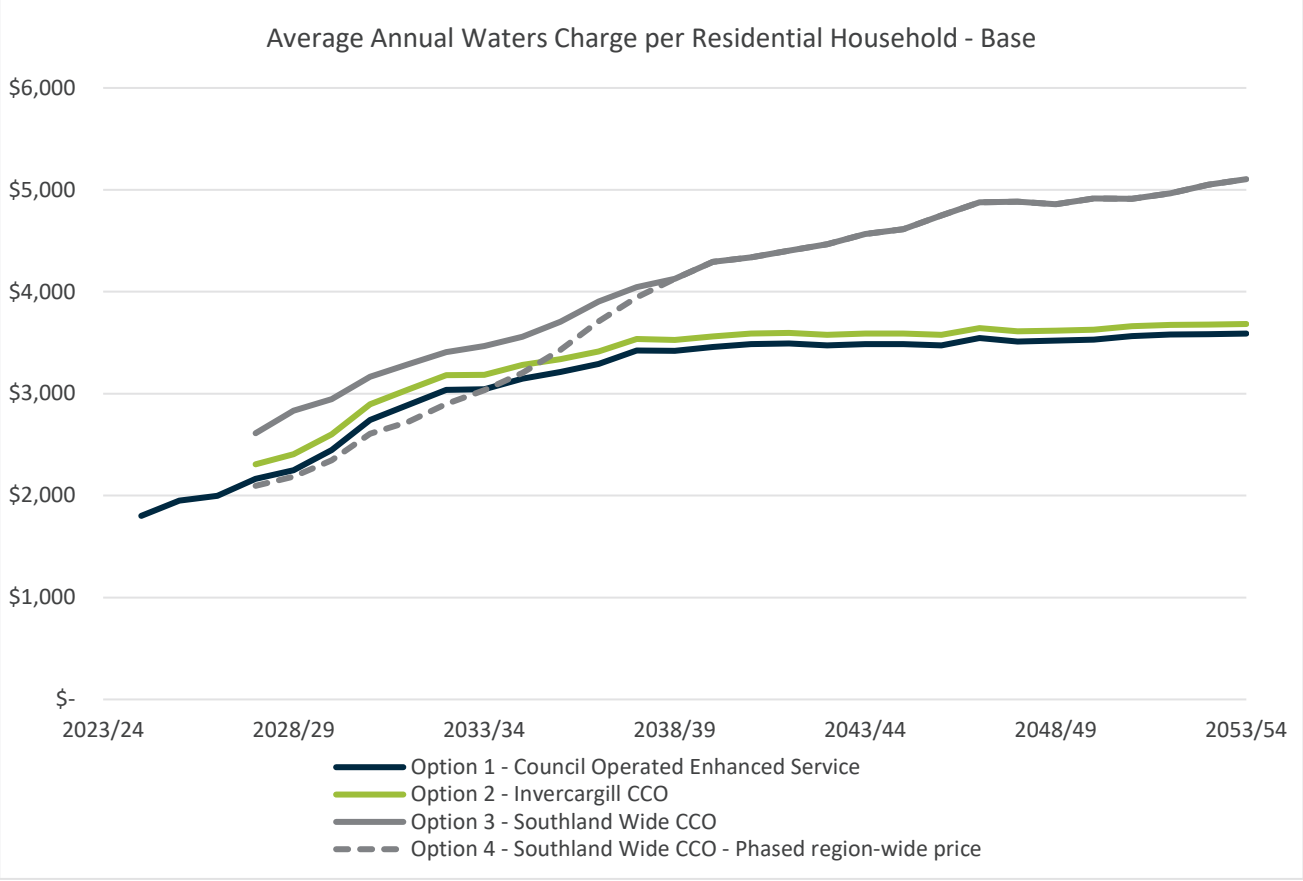
- Where different weighting is applied to the criteria in the multi criteria analysis, regional CCO options (the Otago Southland and Southland wide models with a deferral of price harmonisation) have higher combined scores. In particular, where an equal weighting is applied to all investment criteria, the regional models score higher.

Based on the MCA analysis presented in this report, and consideration of the broader reform context in the Otago and Southland regions, Councillors identified the following service delivery options to be shortlisted:

- Option 1 Council Operated Enhanced Service
- Option 2 Invercargill CCO
- Option 3 Southland Wide CCO - One region-wide price
- Option 4 Southland Wide CCO – Phased introduction of a region-wide price

The impact of each of these shortlisted models on average household three waters charges in Invercargill is shown in the figure below.

Figure 1 Average annual waters charge per residential household for shortlisted options

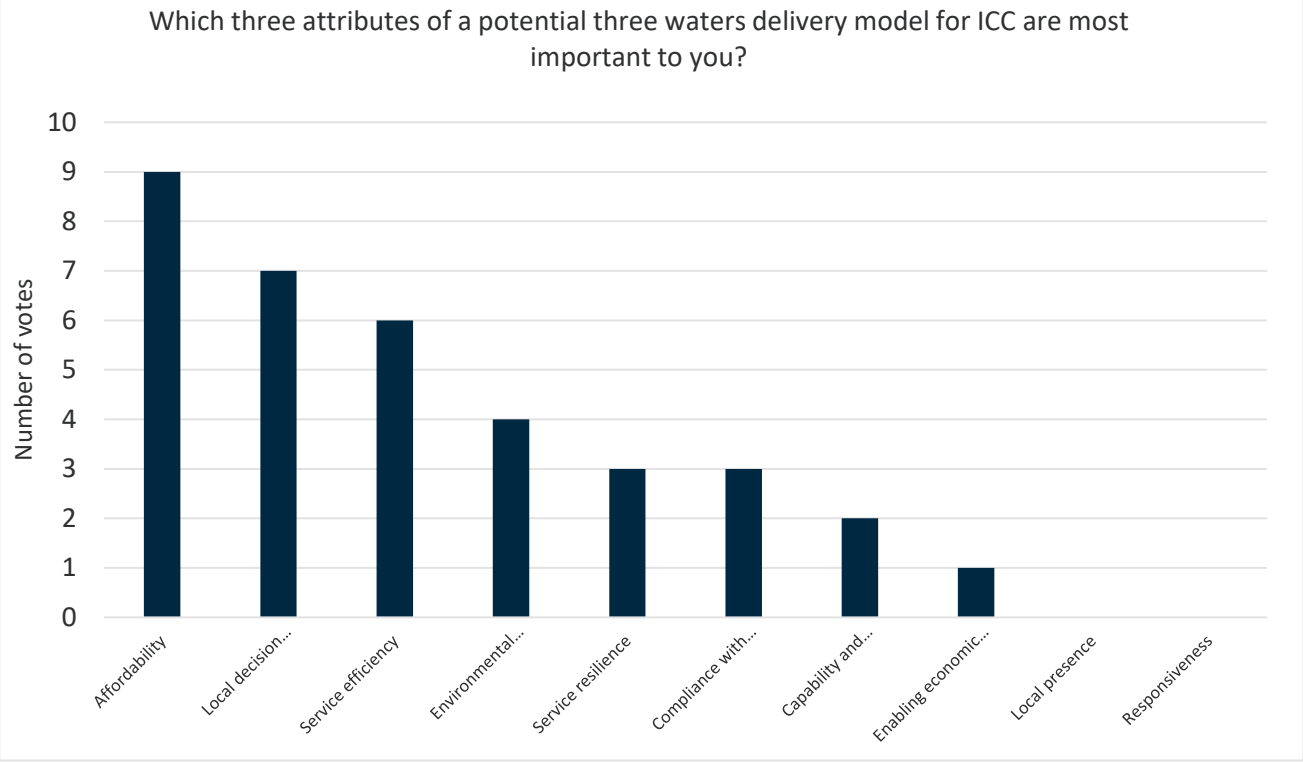


Investment objectives

To allow a fair comparison of options across financial and non-financial criteria, a set of investment objectives was developed with Council's three waters staff and through a facilitated workshop with elected members.

Elected members were surveyed to indicate their views on the three most important attributes of a three waters service delivery model. The results of that survey are highlighted in Figure 2 below. They show a strong preference for a model that is affordable, with a retention of local decision making.

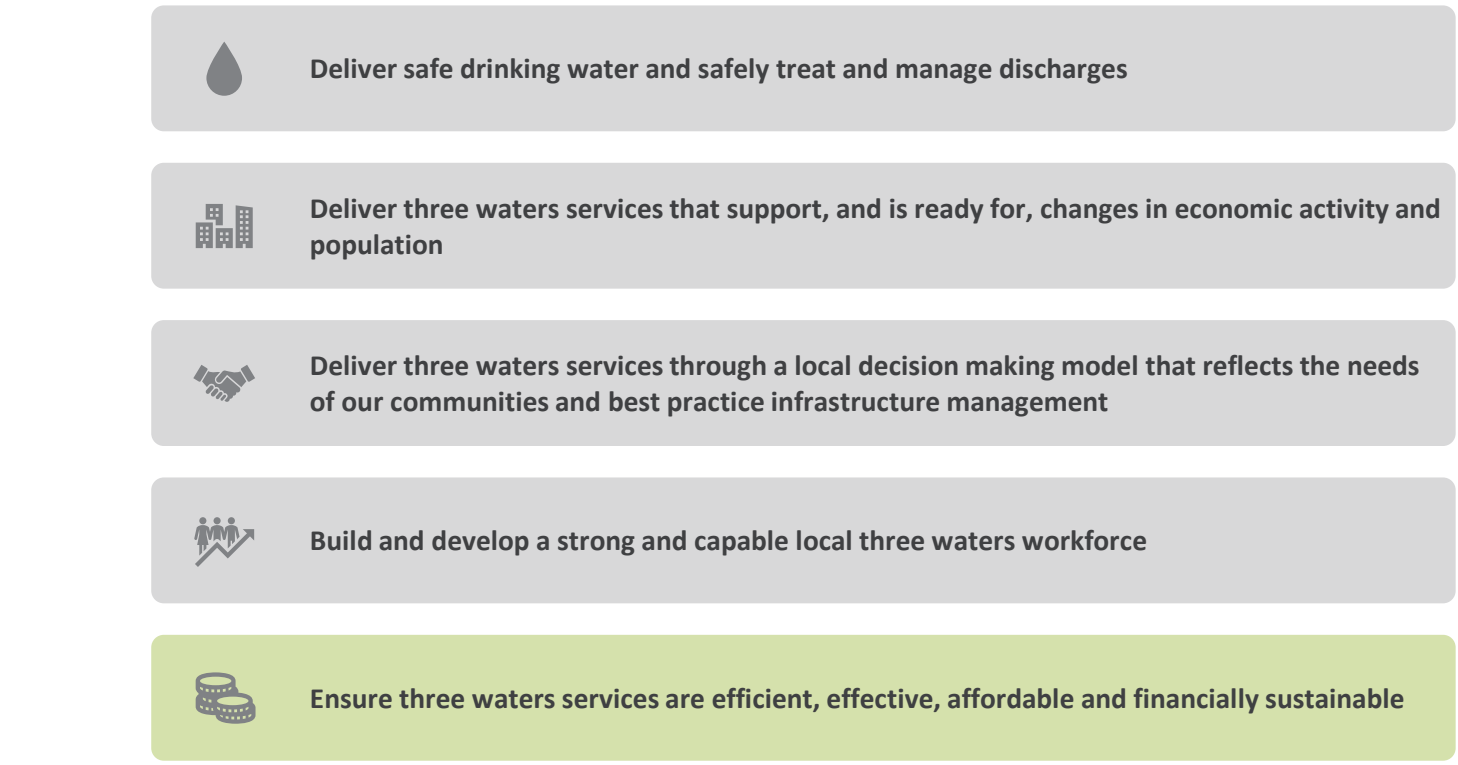
Figure 2 Results of elected members preference survey



These preferences were used to refine investment objectives and determine potential weighting for the investment criteria in the multi criteria assessment.

Investment objectives were based on those developed for the Otago and Southland regional work and refined to meet the local needs of Invercargill. The result is a broad alignment with the Otago Southland regional objectives, with an increased emphasis on local decision making and affordability. The agreed investment objectives are listed in Figure 3 below.

Figure 3 Investment objectives



Green highlighting on the fifth objective indicates that objective was considered to be the most important and has had double the weighting applied to it for Multi Criteria Analysis.

A table showing the alignment of stated preferences from elected members with the proposed investment objectives is provided in Appendix Three.

Multi Criteria analysis

Approach

A desktop assessment of the potential options for three waters service delivery against the agreed investment objectives was carried out by Morrison Low and reviewed by ICC staff. The assessment combined qualitative assessment (for non-financial criteria) and quantitative assessment (for financial criteria).

In completing the assessment, investment objectives were applied a weighting (so all criteria totalled 100%) that reflected the feedback received from elected members in a Council workshop. That resulted in the fifth investment objective "*Ensure three waters services are efficient, effective, affordable and financially sustainable*" having double the weight applied to it.

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.

Scoring for the affordability criteria was completed formulaically. Household charges for three waters were calculated as a percentage of the lowest cost option. The lowest cost option was assigned a score of +3, while the highest cost option a score of -3. Scores were allocated to the remaining options based on their deviation from the lowest cost option. Affordability was assessed at three time points with the average score of all three time points applied to the Multi Criteria Assessment:

- Three waters household charge in 2027/28
- Average three waters household charge over the 30 year modelling period
- Three waters household charges in 2053/54.

Results

The results of the Multi Criteria analysis are shown in Figure 4 below. The full results of the Multi Criteria Analysis, including relevant commentary are included in Appendix One.

Figure 4 Multi criteria analysis results

		Option 1: Council Operated Enhanced Service	Option 2: Invercargill CCO	Option 3: Southland Wide CCO - One regional price	Option 4: Southland Wide CCO- Phased introduction of regional price	Option 5: Otago Southland Wide CCO - One regional price	Option 6: Otago Southland Wide CCO - Phased introduction of regional price	Option 7: Council Operated Service	Option 8: Shared services
Deliver safe drinking water and safely treat and manage discharges	16.7%	1	2	2	2	3	3	0	1
Deliver three waters services that support, and is ready for, changes in economic activity and population	16.7%	2	0	1	1	1	1	2	1
Deliver three waters services through a local decision making model that reflects the needs of our communities and best practice infrastructure management	16.7%	1	2	3	3	1	1	0	-1
Build and develop a strong and capable local three waters workforce	16.7%	0	1	2	2	3	3	-1	0
Ensure that three waters services are efficient, effective, affordable and financially sustainable	33.3%	2	2	-3	-1	-1	1	3	2
Total score (out of three with a range of -3 to 3)	100%	1.33	1.50	0.33	1.00	1.00	1.67	1.17	0.83
Overall assessment		Shortlisted	Shortlisted	Shortlisted	Shortlisted	Not viable	Not viable	Not recommended	Not recommended

To ensure that the weighting applied to investment objectives did not unintentionally introduce bias into the assessment, sensitivity testing was completed with different weighting applied. The results of this are summarised in Figure 5 below.

Figure 5 Sensitivity testing of multi criteria analysis

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8
Base case - Affordability double weighted	1.3	1.5	0.3	1.0	1.0	1.7	1.2	0.8
All weighted evenly	1.2	1.4	1.0	1.4	1.4	1.8	0.8	0.6
Affordability and local decision making double weighted	1.3	1.6	0.7	1.3	1.0	1.6	1.0	0.6

Impacts on levels of service

Multi criteria analysis also considered the impacts of each option on the levels of service provided to water consumers in Invercargill. 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 1 Level of service impacts

	Council Operated Enhanced service	Invercargill CCO	Southland Wide CCO	Otago Southland Wide CCO
Quality and safety of water	• No change	• No change	• No change	• No change
Quantity and pressure of water	• No change	• No change	• No change	• No change
Responsiveness to faults/complaints	• No change	• May have minor improvements	• May have minor improvements	• May have minor improvements. • May have reduced local presence.
Investment in network	• No change	• May have minor increase from improved delivery focus	• May have minor increase from improved delivery focus	• May have increase from improved delivery. • May reduce if access to resources is limited and prioritised elsewhere
Summary	**No Change**	**May have minor improvement**	**May have minor improvement**	**May have 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.

Summary

The multi criteria analysis showed that the highest scoring options were:

- A Council Operated Enhanced Service
- An Invercargill CCO
- An Otago Southland Wide CCO with deferred harmonisation
- A Southland Wide CCO with deferred harmonisation.

Notably, regional models scored highly on non-financial criteria, and sensitivity testing indicated that when equal weightings are applied, the Otago Southland wide model becomes one of the highest scoring options with or without phased introduction of a regional price.

Financial analysis

Introduction and approach

Financial modelling was completed for the Council Operated service, Invercargill CCO, and Southland Wide CCO models. This financial modelling was undertaken using the same financial modelling approach that was used for the Otago Southland combined regions work, and broadly applies the same modelling assumptions.

Assumptions have been scaled to reflect the reduced size and complexity of a single council model and where these assumptions differ from those used in the Otago Southland modelling the differences are noted in Appendix Two.

Modelling is primarily based on Council's LTP and the base data used in the Otago Southland model, with the following notable exceptions:

- An increase in the budget for insurance of 15% has been included to reflect unbudgeted price increases.
- $1.7 million of consequential operating costs have been added to cost estimates for the alternative water supply project. These costs were previously unbudgeted, and the allowance represents the mid-point of estimated operating costs from the alternative water supply business case.
- The ICC in-house scenario in our updated modelling includes an allocation of corporate overhead costs to the three waters activities based on headcount, operating expenditure and asset value in proportion to Council as a whole. Council does not currently apportion overheads directly to individual activities, however our modelling includes this apportionment for consistency.
- The calculation of depreciation in the status quo model is based only on ICC's own average depreciation rates per activity.

The modelling for an Otago Southland Wide entity has not been updated to include these costs. It is unlikely that these costs would have a material impact on financial projections for the Otago Southland modelling. Any such impact would result in slightly higher average household charges in the Otago Southland model than are portrayed in that report (or within this report).

Modelling for the option of a Council Operated Enhanced Service, includes the following additional costs/assumptions regarding the structural change:

- The addition of a cadet programme at $300,000 per annum spread across the three waters activities. The budget amount includes allowance for expert support and training and salaries and wages for at least two cadets.
- $30,000 per year for the addition of an independent advisor to a three waters sub-committee or similar governance body.
- Any other structural changes are only assumed to occur if necessary to improve the performance of the three waters activities, and are assumed to be cost neutral.

Modelling of a Southland Wide entity, and Invercargill CCO, includes all of the above adjustments (including the addition of a cadet programme). Modelling of an Otago Southland Wide CCO has not been updated, however price paths for the scenario with phased introduction of regional prices have been adjusted to reflect the increased costs in ICC.

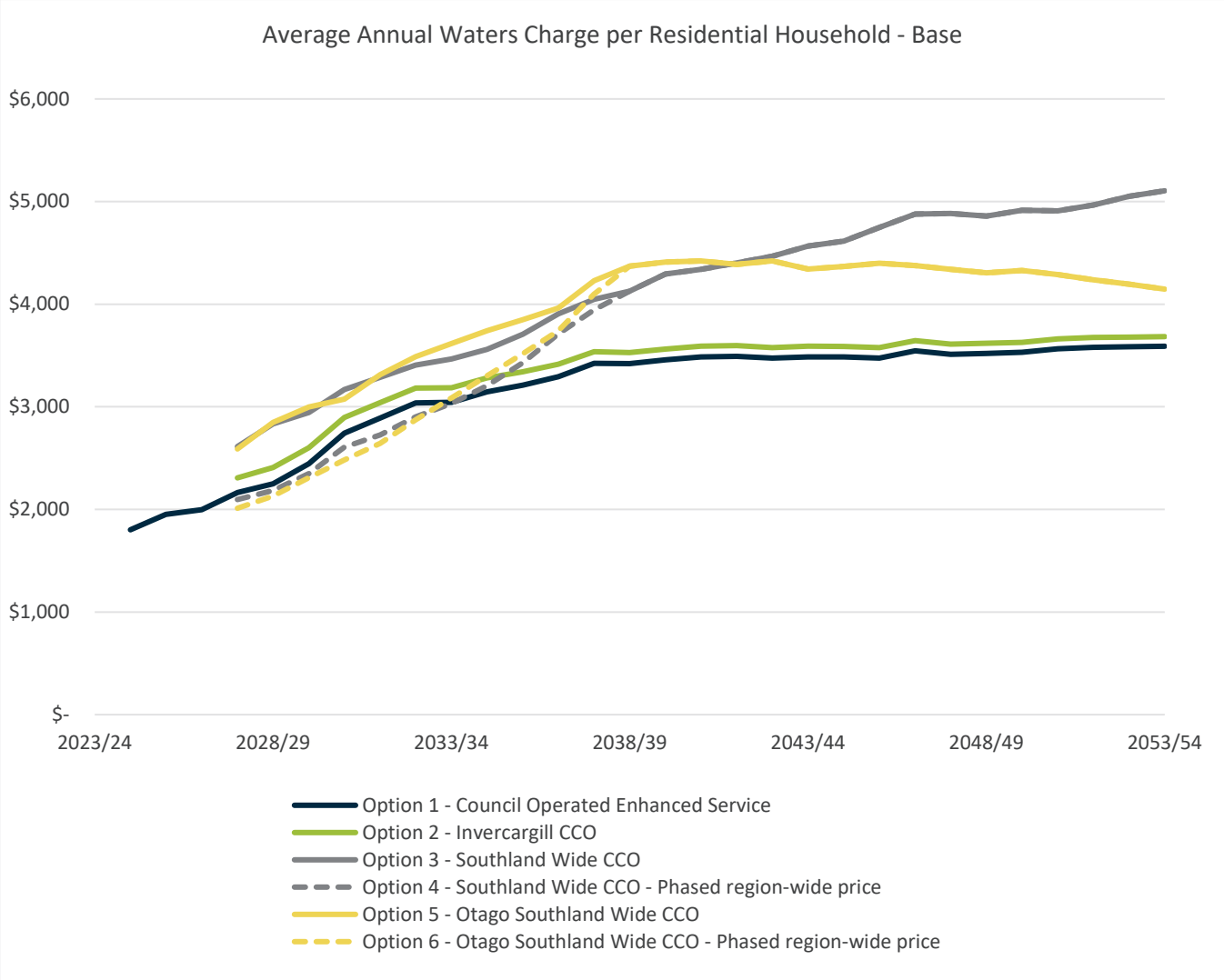
Results

Household charges

Figure 6 below compares average residential household waters charges for ICC as a Council Operated Enhanced Service and as an Invercargill CCO, alongside the combined Otago Southland regional scenario modelled in October 2024. For comparative purposes, all costs are nominal (i.e. they include inflation) and include GST.

Household charges under option 1 (Council Operated Enhanced Service) are 1% higher per annum than those under option 7 "ICC in-house" model. These are not displayed in Figure 6 as the data points are indistinguishable in a chart format. No financial modelling has been completed for "Option 8 – Shared Services".

Figure 6 Average annual waters charge per residential household



Council Operated Enhanced Service vs Invercargill CCO

The household costs under an Invercargill CCO (Option 2), remain slightly higher than the household costs under a Council Operated Enhanced Service (Option 1), and for the duration of our modelling period diverge from the in-house business unit from inception. This is entirely due to the need for a CCO to incur a number of additional costs in its own right.

While the Council Operated Enhanced Service model does include the impact of overheads allocated, the corporate costs of a new water services entity are expected to be higher. These are operational costs which have an immediate impact on three waters charges. Financial modelling assumes that an Invercargill CCO would only be able to achieve marginal efficiencies (3.3% capital expenditure – 3.5% operating expenditure) compared to an in- house model, as there are no economies of scope or scale.

The difference in projected three waters rates is less than 10% between the two models, and could be considered to be within the margin of error for financial modelling of this nature. Impacts on households may be able to be managed through review of the tariff structure, although this would result in increased charges for other customer groups.

Council Operated Enhanced Service vs regional CCOs

The regional three waters project identified that household charges for ICC are below the regional average. There are a range of factors that contribute to this, including ICC's comparatively higher population and connection density and comparatively low level of projected three waters debt. This remains the case for a water services organisation covering just the Southland region.

For the options "Southland Wide Council Controlled Organisation – Phased introduction of a region-wide price" (Option 4) and "Otago and Southland Wide CCO - Phased introduction of a region-wide price" (Option 6) we have assumed that prices will be geographically ringfenced for the first five years of the CCO (with any savings from the CCO pro-rated across all councils) followed by a 7 year transition period to a harmonised price.

It is worth noting that a regional model that includes phased introduction of a region wide price for three waters services, results in lower household charges for ICC ratepayers than a Council Operated Enhanced Service through to 2034. However, we caution that this option may be difficult to achieve at this stage because:

- The outcome would require all councils in the relevant regions to agree to form a water services organisation.
- Phased introduction of a regional price would require agreement from all shareholders of the entity, and may not be on the same terms as modelled.
- These models have the highest annual percentage increases to three waters charges once a regional price is phased in.
- It is unlikely that, from a practical or legal perspective, any such arrangements would be permanent.

Three Waters Debt

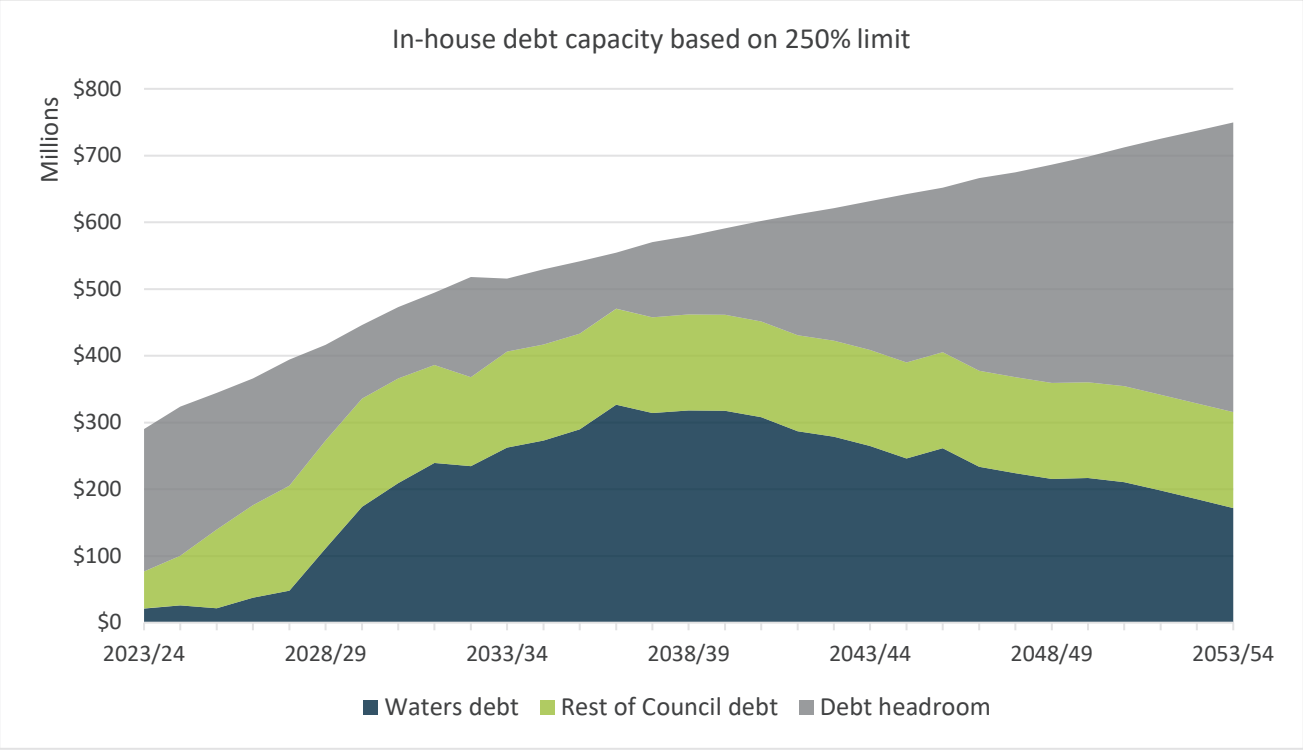
A key difference between the Invercargill CCO and the Council Operated Enhanced Service models is debt. More specifically, the different borrowing limits that apply and the practical impact those differences have on household charges. This is further explained for each model below and shown in the corresponding charts.

Debt under the in-house model

Under the Council Operated Enhanced Service, debt continues to be measured at a total council level. Unlike many councils, ICC currently holds less three waters debt than it does non three waters debt. ICC's current debt is 28% three waters and 72% non-three waters. Three waters debt is currently only equal to 74% of its three waters revenue.

As shown in Figure 7 below, over time, our modelling shows the proportion of ICC's total borrowing will shift heavily towards three waters, peaking at 69% of total council debt in 2037. At this time, Council's three waters debt will reach over 440% of its three waters revenue, effectively meaning Council's total three waters borrowing will benefit from Council's ability to borrow against its total revenue.

Figure 7 In-House debt capacity



As shown in Figure 7, there is no point at which Council's debt headroom is fully utilised. However, our modelling does not include any non-three waters projects outside of those included in the LTP. In 2037, Council's remaining borrowing capacity equates to $84 million.

Debt under the CCO model

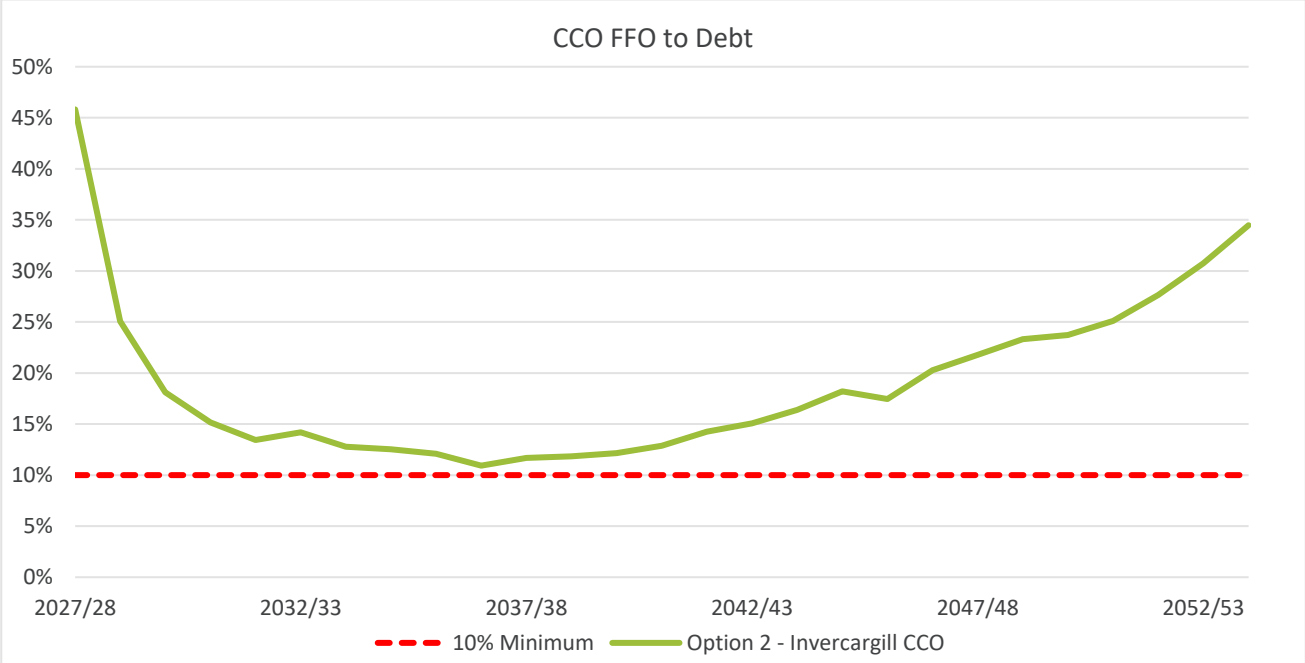
Under a CCO model there is a different approach to debt and how it is measured. Total Council debt and revenue are no longer relevant. Only debt transferred to the CCO is considered and only revenue generated by the CCO is considered.

A different ratio is also used, funds from operations (FFO) to debt, where the benchmark is maintaining a ratio above 10%[1]. For ICC, FFO effectively represents the cash surplus from operations. The 10% FFO-to-debt threshold often produces outcomes near 500% debt-to-revenue. However, FFO focuses on free cash flows relative to the closing debt balance rather than comparing operating revenue to debt.

Where these FFO limits were breached in our modelling, an adjustment is applied to the CCO's revenue to ensure no breach occurs in the base case results presented in this reporting. No such situation arises in our base case modelling of a wholly owned CCO. This is illustrated in Figure 8 below.

The borrowing capacity that exists in the CCO model may allow the entity to further utilise debt to fund other elements of its capital expenditure programme, such as renewals, or reduce its reliance on depreciation funding. This could result in lower revenue requirements (and therefore household charges), and higher levels of debt. We have not modelled the impact of such an approach.

Figure 8 CCO FFO to debt



[1] LGFA guidance indicates that this benchmark will sit between 8%-12%. There is currently no clear guidance about the precise ratio that will be applied. 10% has been applied as a mid point value, having regard to the credit rating matrix approach used by Moody's.

Impact on three waters debt

Both service delivery models demonstrate the ability to manage and control debt over the entire modelling period in our base case modelling scenarios. This means over the modelling period the only difference in debt levels relates to:

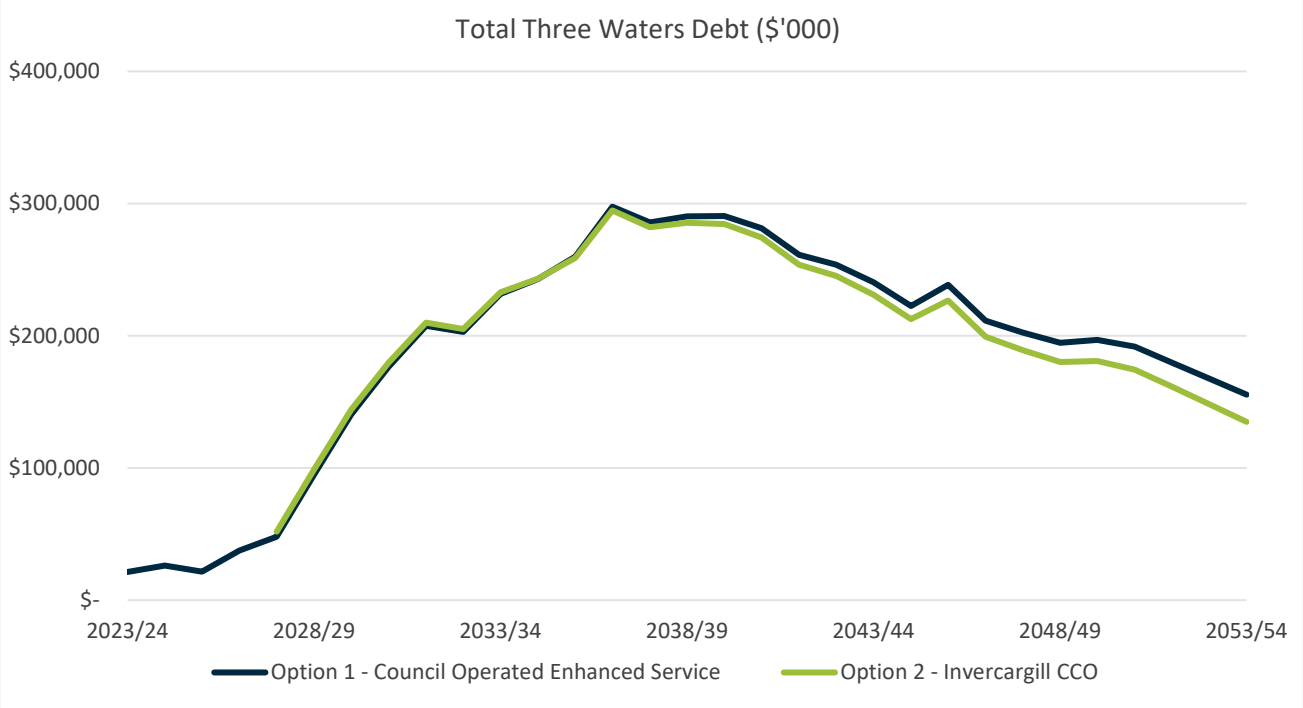
- The debt funding of any establishment costs for the CCO
- The cumulative impact of capital expenditure efficiencies that may be available to a CCO.

Differences in total borrowing requirements are therefore minor, as demonstrated in Figure 9 below. By 2054 the CCO holds an estimated $20 million less debt than the in-house delivery model.

There is no difference in total borrowing requirements for Option 2 (ICC in-house delivery with structural change) when compared to Option 1 (ICC in-house delivery).

Comparison of debt between a Southland Wide CCO (Options 3 and 4) and an in-house delivery model (Option 1) are difficult to highlight visually due to the pooling of debt in a regional model.

Figure 9 Total three waters debt



Sensitivity testing

Review of historical Long Term Plans prepared by Councils across the country shows that investment needs are typically understated, with capital works programmes regularly increasing in value between Long Term Plans.

To ensure a decision is made with full regard to risk, financial modelling has been completed representing an "increased investment scenario". This scenario includes additional capital expenditure for:

- An additional $1 million per year to improve asset management, including through improved systems, plans and increased resourcing. This expenditure is treated as operational expenditure in our modelling.
- An additional $30 million of capital expenditure has been included to provide sufficient funding for a full alternative water supply. This brings the total budget for the alternative water supply to $90 million (from a previous $60 million).
- An additional $1 million per year on capital expenditure on stormwater ditches, to improve health and safety concerns related to deep or dangerous open drains.
- $15 million for replacement of the Doon Street reservoir.
- An additional $60 million of projected capital expenditure to add reticulated water and wastewater services to parts of Otatara.

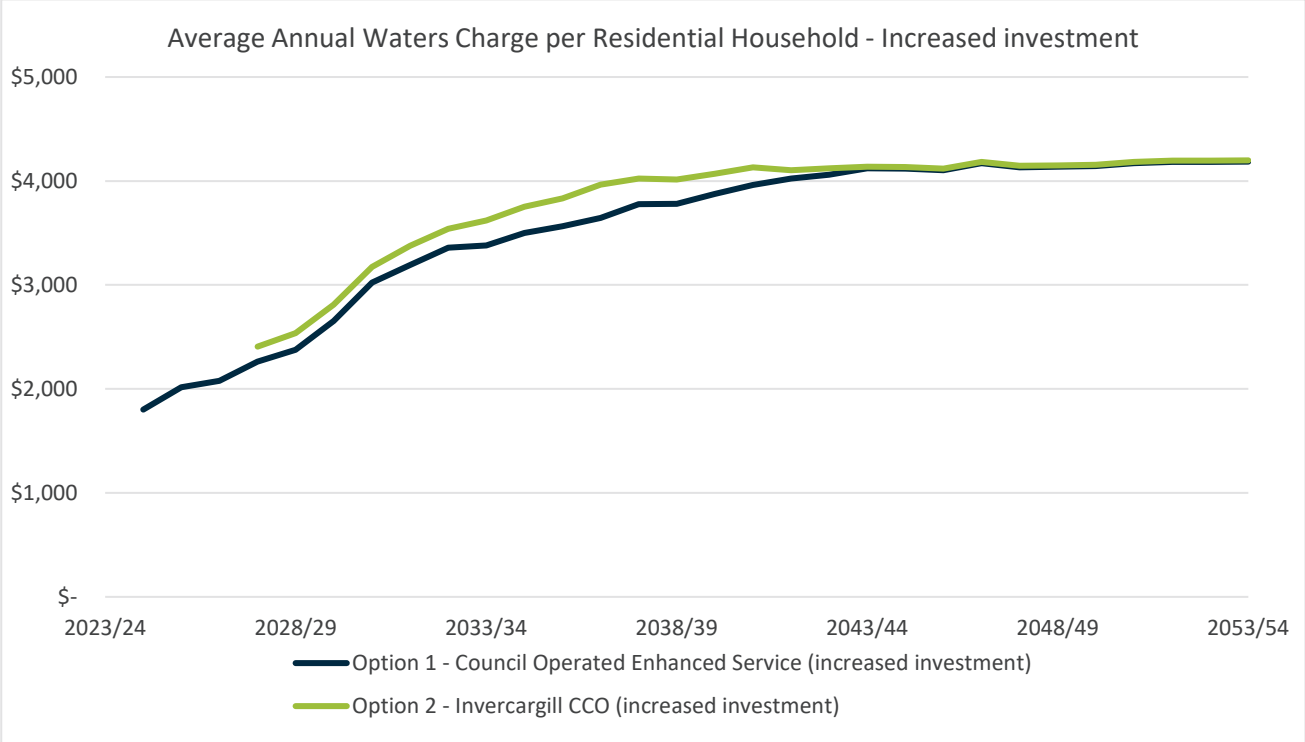
The additional expenditure amounts to an increase of $145 million (including inflation) of three waters capital works over the 30 year modelling period.

This modelling is intended to demonstrate the resilience of both models to increasing investment needs. It does not represent a recommendation to specifically make provision for the above-mentioned projects.

Household charges

The impact of the increased investment scenario for both models is shown in Figure 10 below.

Figure 10 Household charges in both delivery models – increased investment scenario



The chart shows household charges under both models converging to being comparably equal by 2043. Over the period from 2032 – 2043, capital investment needs in the Invercargill CCO are such that the CCO needs to raise additional revenue to remain within lending covenants, this results in a significant uplift in- household charges compared to the in-house and base case models over that time period.

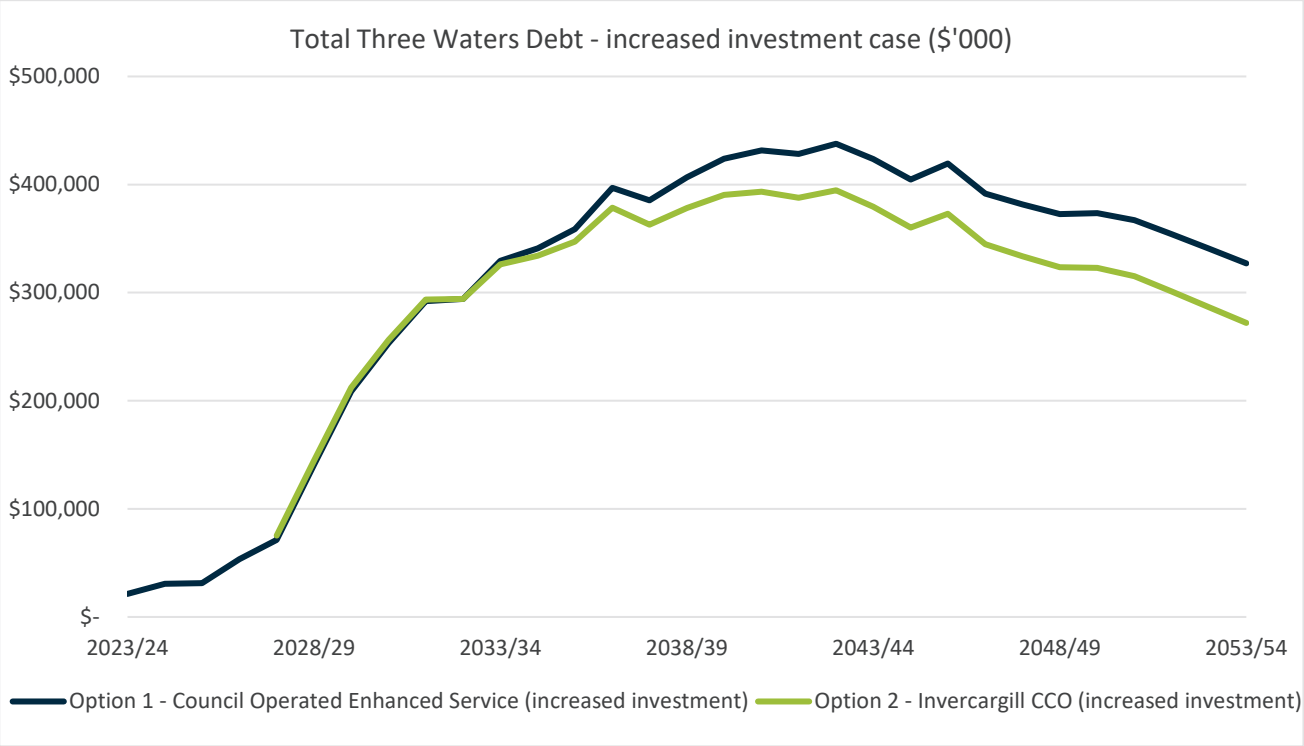
Impact on three waters debt

The impact of the increased investment scenario on entity debt is highlighted in Figure 11 below. Note that under the increased investment scenario the CCO breaches its borrowing limits in 2032 and therefore needs to increase charges to remain within lending covenants.

This results in the CCO having $54 million less total three waters debt than the in-house model in the increased investment scenario. Comparison of debt between a Southland Wide CCO (Options 3 and 4) and a Council Operated Enhanced Service (Option 1) are difficult to highlight visually due to the pooling of debt in a regional model.

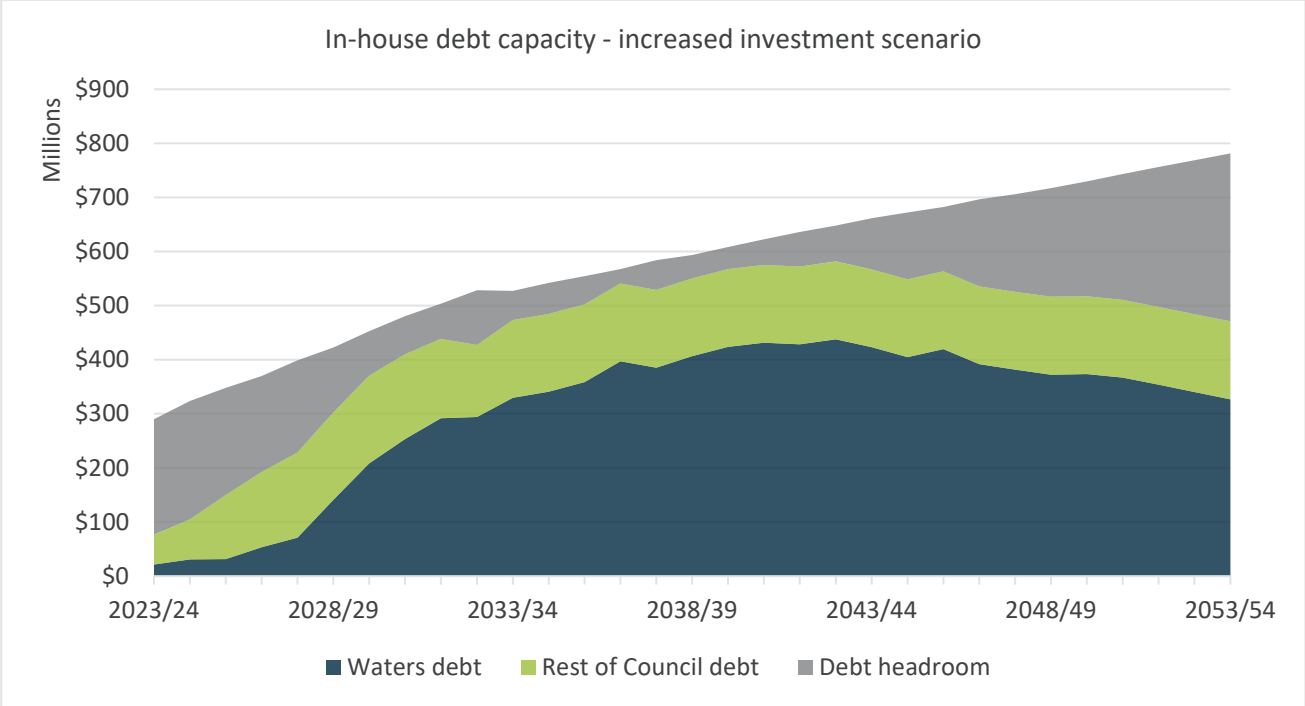
Three waters debt is the same across Option 1 (Council Operated Enhanced Service) and Option 7 (Council Operated Service)

Figure 11 Total three waters debt in both delivery models – increased investment scenario



At a whole of council level, ICC's debt remains within its total borrowing capacity over the modelling period, even under the increased investment scenario. However as shown in Figure 12 below, under this scenario, ICC's total borrowing headroom reduces to as low as $27 million in 2037, and it's three waters borrowing reaches as much as 75% of its total borrowing.

Figure 12 In-house debt capacity – increased investment scenario



Appendix One – Full Multi Criteria analysis

ICC MCA for water service delivery options									
Options		**Option 1: Council Operated Enhanced Service**		**Option 2: Invercargill CCO**		**Option 3: Southland Wide CCO - One regional price**		**Option 4: Southland Wide CCO- Phased introduction of regional price**	
Description of option		Some additional structural change May include a 3 waters sub committee with independent members		Creates more borrowing capacity in council Adds a professional board Solely focussed on three waters Would include transfer of assets and setting of charges		Establish an asset owning WSE with Southland regional neighbours Adds some scales, opportunities for network optimisation, regional focus One regional price		Establish an asset owning WSE with Southland regional neighbours Adds some scales, opportunities for network optimisation, regional focus Includes local prices for 5 years follwed by 7 year transition period	
Assessment Criteria	**Weighting**		**Comments**		**Comments**		**Comments**		**Comments**
Deliver safe drinking water and safely treat and manage discharges	16.7%	1	It is assumed that any structural change that would occur at an operational/management level would be for the purpose of improving delivery, planning and capability. Structural change at a governance level would also improve risk management and provide independent advice to elected members.	2	Independence of decision making, and dedicated focus of management and governance will result in fewer competing priorities and improved investment management/planning	2	Independence of decision making, and dedicated focus of management and governance will result in fewer competing priorities and improved investment management/planning	2	Independence of decision making, and dedicated focus of management and governance will result in fewer competing priorities and improved investment management/planning
Deliver three waters services that support, and is ready for, changes in economic activity and population	16.7%	2	No material difference to option 1	0	May have improved asset management planning, but will have a primary focus on three waters services rather than local economic growth. Some requirement to consider economic growth could be addressed through a statement of expectations.	1	Will have the ability to work within the region to identify opportunities to service household or economic growth more efficiently. The local economy in Invercargill is heavily influenced by activity outside of the city boundary, so regional decision making is likely to improve outcomes. A multi-council CCO may not reflect all of ICC's priorities, and would likely have a strong focus on delivery of efficient and effective 3 waters services rather than supporting growth.	1	Will have the ability to work within the region to identify opportunities to service household or economic growth more efficiently. The local economy in Invercargill is heavily influenced by activity outside of the city boundary, so regional decision making is likely to improve outcomes. A multi-council CCO may not reflect all of ICC's priorities, and would likely have a strong focus on delivery of efficient and effective 3 waters services rather than supporting growth.
Deliver three waters services through a local decision making model that reflects the needs of our communities and best practice infrastructure management	16.7%	1	Per option 1. Addition of structural change are assumed to only occur if they create improvements around infrastructure management and decision making. Any addition of independent members of sub-committee will give a dedicated view of asset management at the governance level.	2	Decision making will remain local but will be made in an environment where both governance and management have a sole focus on three waters infrastructure and will be appropriately qualified. Access to directors and management may be limited as there will be a lot of competition from similar arrangements, or larger water entities.	3	Decision making will be local to the Southland region. A single focus of the WSE on three waters service delivery will ensure that decisions of the board and management reflect best practice infrastructure management. Increased scale may improve attractiveness of roles within the WSE.	3	Decision making will be local to the Southland region. A single focus of the WSE on three waters service delivery will ensure that decisions of the board and management reflect best practice infrastructure management. Increased scale may improve attractiveness of roles within the WSE.
Build and develop a strong and capable local three waters workforce	16.7%	0	Addition of a cadet programme and independent focus at sub committee level likely to improve capability of local workforce	1	A standalone WSE will still lack scale to attract or develop staff, however it will have more operational discretion to set budgets and staff pay to ensure market competitiveness.	2	Increased scale may result in more attractive employment opportunities and more opportunities to develop staff. The entity will not have significant scale compared to some large councils or WSEs elsewhere in New Zealand.	2	Increased scale may result in more attractive employment opportunities and more opportunities to develop staff. The entity will not have significant scale compared to some large councils or WSEs elsewhere in New Zealand.
Ensure that three waters services are efficient, effective, affordable and financially sustainable	33.3%	2	Based on modelling. Scaled based on delta between lowest cost and highest cost model at incep[tion, 30yr and 30yr average price points	2	Based on modelling. Scaled based on delta between lowest cost and highest cost model at incep[tion, 30yr and 30yr average price points	-3	Based on modelling. Scaled based on delta between lowest cost and highest cost model at incep[tion, 30yr and 30yr average price points	-1	Based on modelling. Scaled based on delta between lowest cost and highest cost model at incep[tion, 30yr and 30yr average price points
Total score (out of three with a range of -3 to 3)	**100%**	**1.33**		**1.50**		**0.33**		**1.00**	
Overall assessment		**Shortlisted**		**Shortlisted**		**Shortlisted**		**Shortlisted**	

ICC MCA for water service delivery options

Multi Criteria Analysis

Options		Option 5: Otago Southland Wide CCO - One regional price		Option 6: Otago Southland Wide CCO - Phased introduction of regional price		Option 7: Council Operated Service		Option 8: Shared services	
Description of option		Establish an asset owning WSE for Otago and Southland. Adds significant scale, opportunities for efficiencies One regional price		Establish an asset owning WSE for Otago and Southland. Adds significant scale, opportunities for efficiencies Inclues 5 years of ringfenced prices and a 7 year transition to harmoisation thereafter		Financial ringfencing No significant changes to service delivery approach Minimum changes to meet legislative requirements		Working with neighbouring councils or councils with similar asset management systems and processes on some shared services. May include procuring services from a regional WSE. Scale could be large or small	
Assessment Criteria	**Weighting**		**Comments**		**Comments**		**Comments**		**Comments**
Deliver safe drinking water and safely treat and manage discharges	16.7%	3	Independence of decision making, and dedicated focus of management and governance will result in fewer competing priorities and improved investment management/planning. Scale will allow improved access to specialists and expertise.	3	Independence of decision making, and dedicated focus of management and governance will result in fewer competing priorities and improved investment management/planning. Scale will allow improved access to specialists and expertise.	0	ICC currently faces no financial constraints for the delivery of compliant or safe three waters services. Competition with other council priorities may impact prioritisation but this risk is considered low in a regulated environment	1	Shared services should give rise to either financial or operational efficiencies or access to additional resources or specialists that are otherwise not able to be access by ICC. This may not give rise to lower costs but may result in improved outcomes.
Deliver three waters services that support, and is ready for, changes in economic activity and population	16.7%	1	Will have the ability to work within the region to identify opportunities to service household or economic growth more efficiently. The local economy in Invercargill is heavily influenced by activity outside of the city boundary, so regional decision making is likely to improve outcomes. A multi-council CCO may not reflect all of ICC's priorities, and would likely have a strong focus on delivery of efficient and effective 3 waters services rather than supporting growth.	1	Will have the ability to work within the region to identify opportunities to service household or economic growth more efficiently. The local economy in Invercargill is heavily influenced by activity outside of the city boundary, so regional decision making is likely to improve outcomes. A multi-council CCO may not reflect all of ICC's priorities, and would likely have a strong focus on delivery of efficient and effective 3 waters services rather than supporting growth.	2	ICC has a broader ambit than pure delivery of three waters services, and as such may be inclined to make investment decisions to proactively stimulate the economy. However, there would be no specific opportunities to work regionally, and ICC's position as a service town for the Southland region means growth or decline outside of ICC's boundaries may impact its need to respond with infrastructure.	1	Shared services may offer opportunities to leverage regional economic data or make cross boundary investment. However, many such arrangements have failed to show enduring benefits elsewhere in the country.
Deliver three waters services through a local decision making model that reflects the needs of our communities and best practice infrastructure management	16.7%	1	Decision making will be at an Otago-Southland level, although mechanisms may be developed to capture some local feedback or priorities. A single focus of the WSE on three waters service provision will ensure that the decisions of the board and management reflect best practice asset management. Significant scale would attract top quality candidates for management and governance roles.	1	Decision making will be at an Otago-Southland level, although mechanisms may be developed to capture some local feedback or priorities. A single focus of the WSE on three waters service provision will ensure that the decisions of the board and management reflect best practice asset management. Significant scale would attract top quality candidates for management and governance roles.	0	Decision making will continue to remain local at both the management and governance level. Governance is through elected members who are elected to represent the views of their communities. Elected members have competing priorities, and a diverse range of skills. Not all elected members have a strong infrastructure, asset management, or financial management backgrounds.	-1	Decision making will continue to be local and will largely be consistent with option 1. Local decision making may be compromised, and experience of similar models in the water sector indicates separation of control and risk sharing typically results in poor outcomes
Build and develop a strong and capable local three waters workforce	16.7%	3	The WSE would have significant scale enabling it to have strong career pathways and staff development opportunities. It would be likely to have sufficient financial capacity to pay competitive market rates.	3	The WSE would have significant scale enabling it to have strong career pathways and staff development opportunities. It would be likely to have sufficient financial capacity to pay competitive market rates.	-1	Lack of scale and geographic isolation makes it difficult to attract staff. Not all three waters professionals are willing to work within a council environment. Council struggles to compete with private sector on pay or career development opportunities.	0	Shared services, unless fully comprehensive through a management CCO, are unlikely to result in a change in employment conditions or career opportunities in participating councils. Modest increase in score reflect potential for shared services to increase access to specialists or a diverse workforce.
Ensure that three waters services are efficient, effective, affordable and financially sustainable	33.3%	-1	Based on modelling. Scaled based on delta between lowest cost and highest cost model at incep[tion, 30yr and 30yr average price points	1	Based on modelling. Scaled based on delta between lowest cost and highest cost model at incep[tion, 30yr and 30yr average price points	3	Based on modelling. Scaled based on delta between lowest cost and highest cost model at incep[tion, 30yr and 30yr average price points	2	Estimated - assumed not to be more expensive than existing model but for savings to be marginal
Total score (out of three with a range of -3 to 3)	**100%**	**1.00**		**1.67**		**1.17**		**0.83**	
Overall assessment		**Not viable**		**Not viable**		**Not recommended**		**Not recommended**	

Appendix Two – Modelling assumptions

Transitional costs to establish a CCO

Item	Option 2 – Invercargill CCO	Options 3 and 4 - Southland Wide CCO	Options 5 and 6 - Otago Southland Wide CCO	Rationale
Transitional body				Set up shell company, appoint Board, CEO and GMs progressively ahead
IT infrastructure & systems				The Otago Southland Wide CCO will be required or will choose to purchase their own corporate (GL, billing, payroll etc), asset management, CRM and customer service and configure those
Legal & compliance				Transfer of all titles, duties, rights & obligations
Finance & Finding				Establish new entity financial structure, balance sheet, debt arrangements, charging and pricing etc
Restructure costs				No forced redundancies but assumed some technical redundancies would be allowed for where staff are between 20% and 80% on three waters
Programme and project management, back fill of key roles				Resources to manage the programme of change, stakeholder engagement and support councils to backfill key roles if and when those are drawn into the transition process
Total transition costs	$3.9M	$7.9M	$50.6M	Used NTU estimates an approach for calculating and then apportioning total cost to transition to entity model by population. Total NTU transition costs ($1,.45B) scaled back (by 50% for a regional CCO and 75% for an Invercargill CCO) to recognise new approach, tailored to each CCO and use localized solutions to reduce overall costs

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CCO Costs and Benefits

Item	Option 1 - Council Operated Enhanced Service [2]	Option 2 – Invercargill CCO	Options 3 and 4 - Southland Wide CCO	Options 5 and 6 - Otago Southland Wide CCO	Rationale
Governance	$30,000	$180,000	$180,000	$180,000	Five Directors including Chair. Director fees based on Wellington Water and double for the Chair Council Operated Enhanced Service allows for one independent member on a three waters sub-committee
Stakeholder governance	-	$150,000	$250,000	$400,000	Costs of supporting shareholder Councils & Māori to develop and implement accountability framework
Executive team costs	-	$790,000	$970,000	$1,350,000	CEO & Four GMs in Otago Southland CCO CEO and 3 GMs in ICC CCO, lower salary
IT infrastructure & systems	-	Removed, included in "additional resources"	$3.6M	$12,646,837	Uses Watercare IT budget as the basis and scaled based on population served
Regulatory compliance	$443,000	$443,000	$796,000	$2,761,000	Budget of Taumata Arowai ($19M) doubled to represent an economic regulator as well, apportioned by population served. Assume internal resourcing proportional to regulator resourcing. *[exists in comparator case as well]*
Auditor costs	-	$200,000	$200,000	$200,000	Additional costs for audit
Council rates	-	$473,147	$821,312	$3,439,332	The cost of paying rates to councils for water assets located on council land per entity J model
Additional resources	$300,000	$1,863,762	$936,000	$3,312,000	Includes HR, IT, Finance, health and safety and customer service + operational staff where required in Otago Southland

[2] Relative to ICC base case

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Item	Option 1 - Council Operated Enhanced Service [2]	Option 2 – Invercargill CCO	Options 3 and 4 - Southland Wide CCO	Options 5 and 6 - Otago Southland Wide CCO	Rationale
					All models other than Otago Southland Wide CCO include allowance of $300,000 to establish a cadet programme
Accommodation - office rent	-	$231,840	$393,120	$1,391,040	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	-	$23,184	$39,312	$139,104	10% of office accommodation cost for insurance, electricity etc
Office fit out	-	$409,170	$777,067	$2,455,020	Based on 15m^2 per staff member x state service guide fitout allowance. Included in transition cost
Service fees from ICC	-	$419,433			Covers accounting, payroll, accounts payable and accounts receivable services based on airport contract arrangements

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Appendix Three – Mapping of investment objectives to elected member preferences

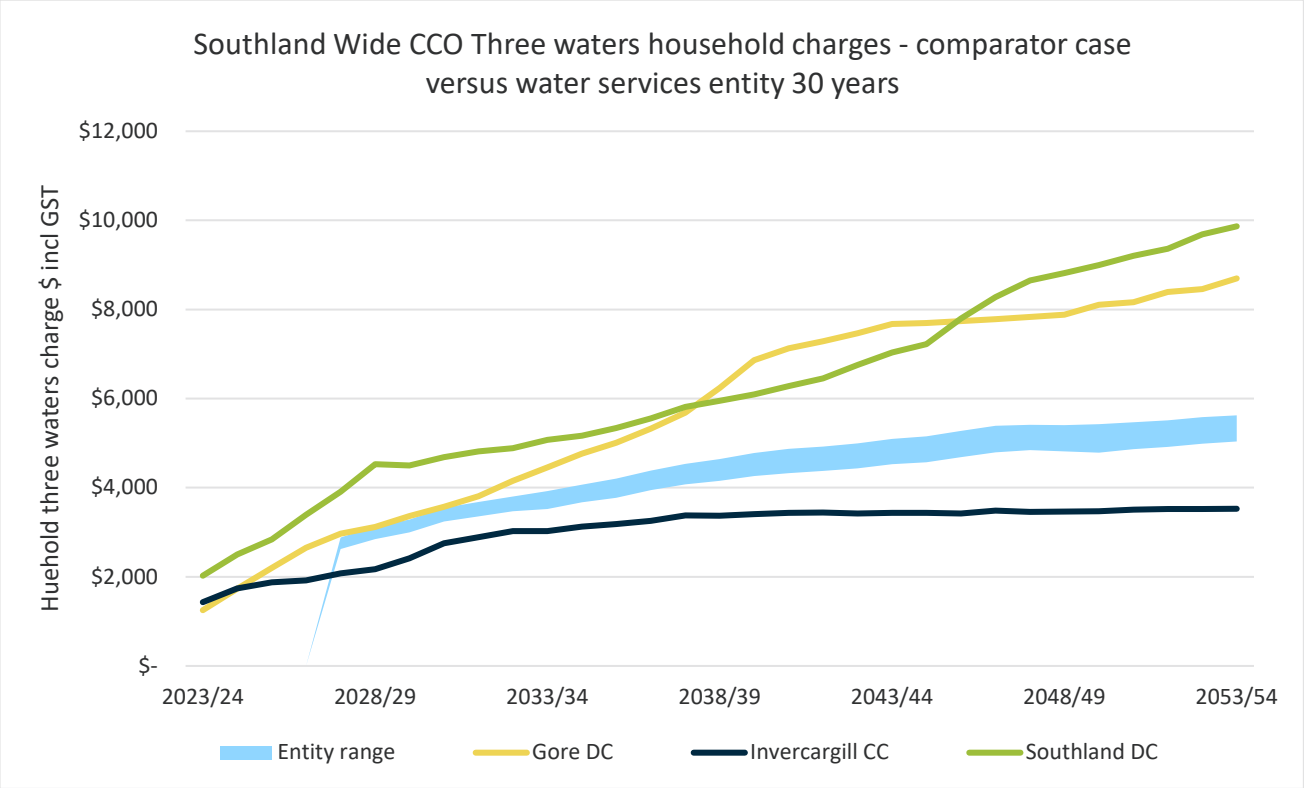
	Deliver safe drinking water and safely treat and manage discharges	Deliver three waters services that support, and is ready for, changes in economic activity and population	Deliver three waters services through a local decision making model that reflects the needs of our communities and best practice infrastructure management	Build and develop a strong and capable local three waters workforce	Ensure three waters services are efficient, effective, affordable and financially sustainable
Affordability					✓✓✓
Service efficiency			✓	✓	✓✓
Environmental performance	✓✓✓				
Service resilience			✓	✓✓	✓
Local presence			✓	✓✓✓	
Enabling economic and population growth		✓✓✓	✓		
Compliance with regulation and standards	✓✓✓				✓
Local decision making		✓	✓✓✓	✓	
Capability and capacity of workforce				✓✓✓	
Responsiveness		✓	✓	✓✓✓	

Appendix Four – Southland Wide CCO

Average household charges

The chart below presents (nominal) average household charges for the base comparator case for each council against the average regional charge for a Southland Wide CCO.

The range of charges for the entity is represented by the shaded area behind the chart. The range represents uncertainty regarding costs and benefits of a Southland Wide CCO, and includes an upper range which incorporates double the costs with half the benefits, and a lower range which represents a 50% uplift in available efficiencies (from 7.5% on capital expenditure and 8% on operating expenditure to 11% on capital expenditure and 12% on operating expenditure).



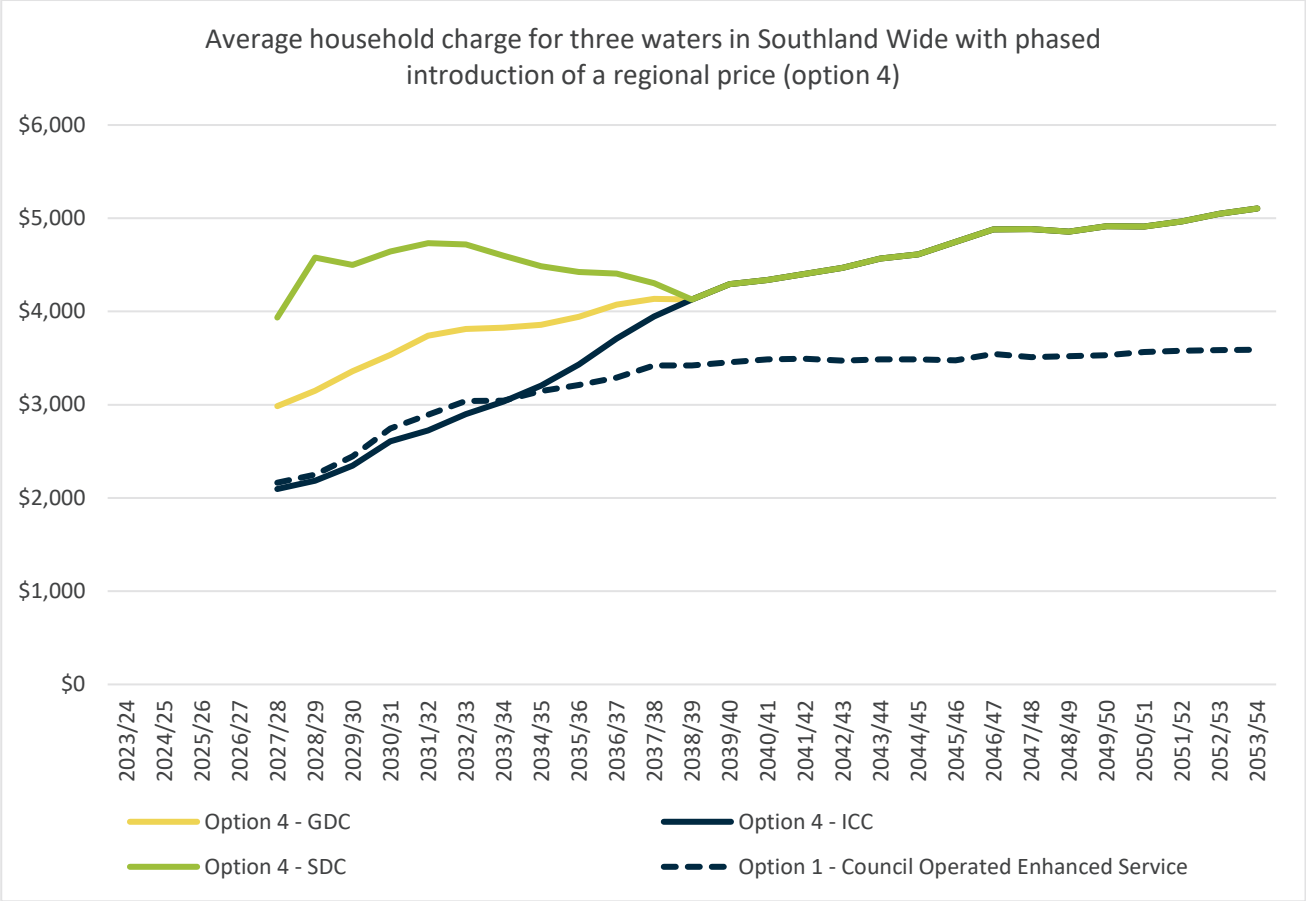
The chart shows Invercargill's three waters charges remaining below the entity's harmonised price over the duration of the modelling period.

It is therefore unlikely that a Southland Wide CCO would be beneficial for water consumers of Invercargill unless prices were geographically ringfenced.

We would caution that while 30 year projections have been developed based on capital programmes contained within each council's infrastructure strategy, cost estimation over this time horizon is highly uncertain.

While the Southland Wide CCO price path is presented as an average charge across the region, we note that this price path could instead be phased in over time (or not at all).

A phased introduction of a regional-wide price (Option 4) has been produced to show the impact that this may have on charges for water consumers in Invercargill**.** The full details of a price path would need to be agreed if a CCO were to be established.



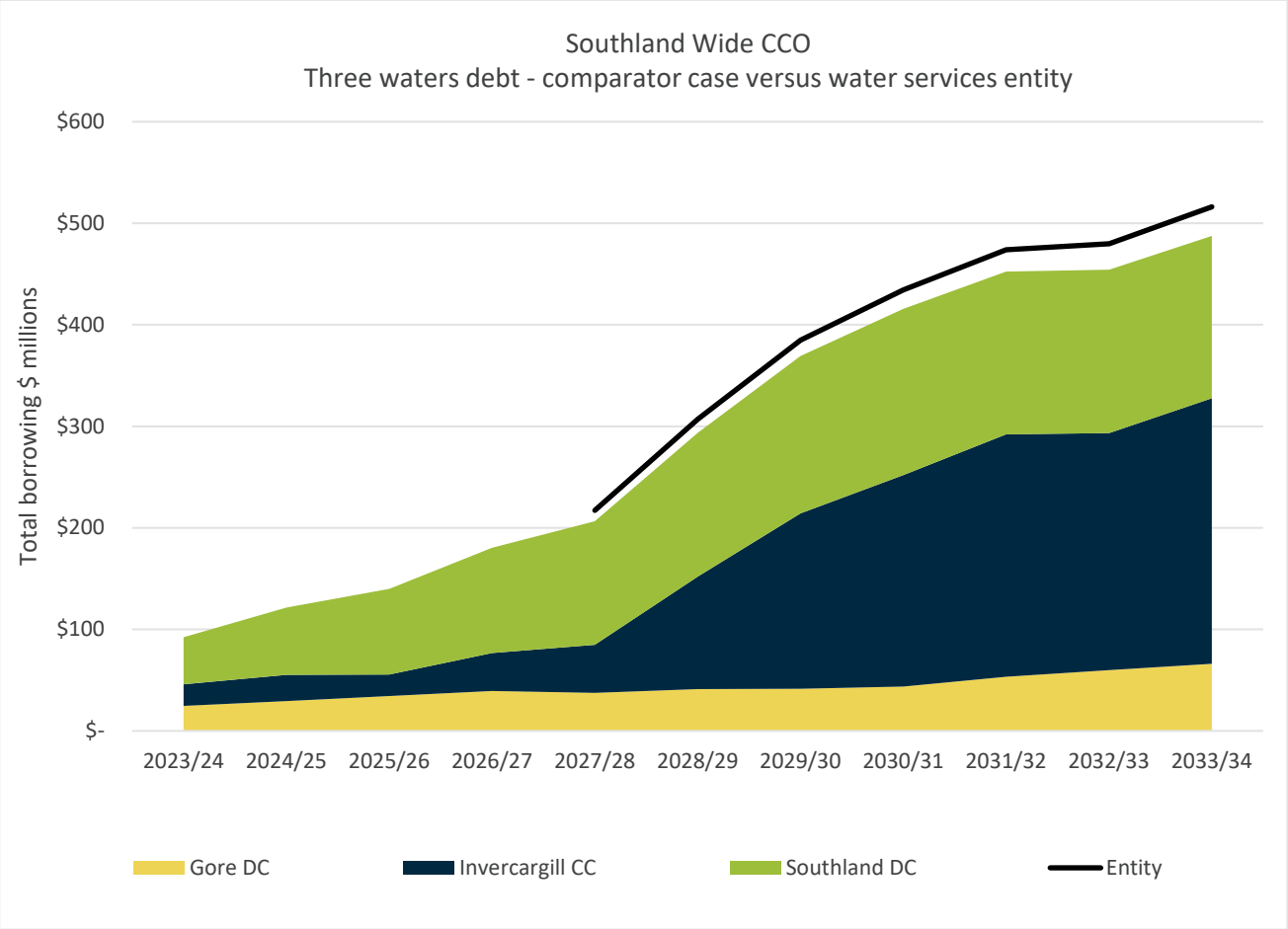
Phasing the transition to a regional price would see three waters charges for Invercargill water consumers being lower through to 2034 than they otherwise would be in an in house delivery model. Beyond 2034 (when prices transition to a regional price in our modelling), household charges for water consumers in Invercargill would be more than $500 higher in a Southland regional entity than they otherwise would be.

Debt

The chart below shows total Southland Wide CCO (options 3 and 4) debt compared to the combined three waters debt of the participating councils.

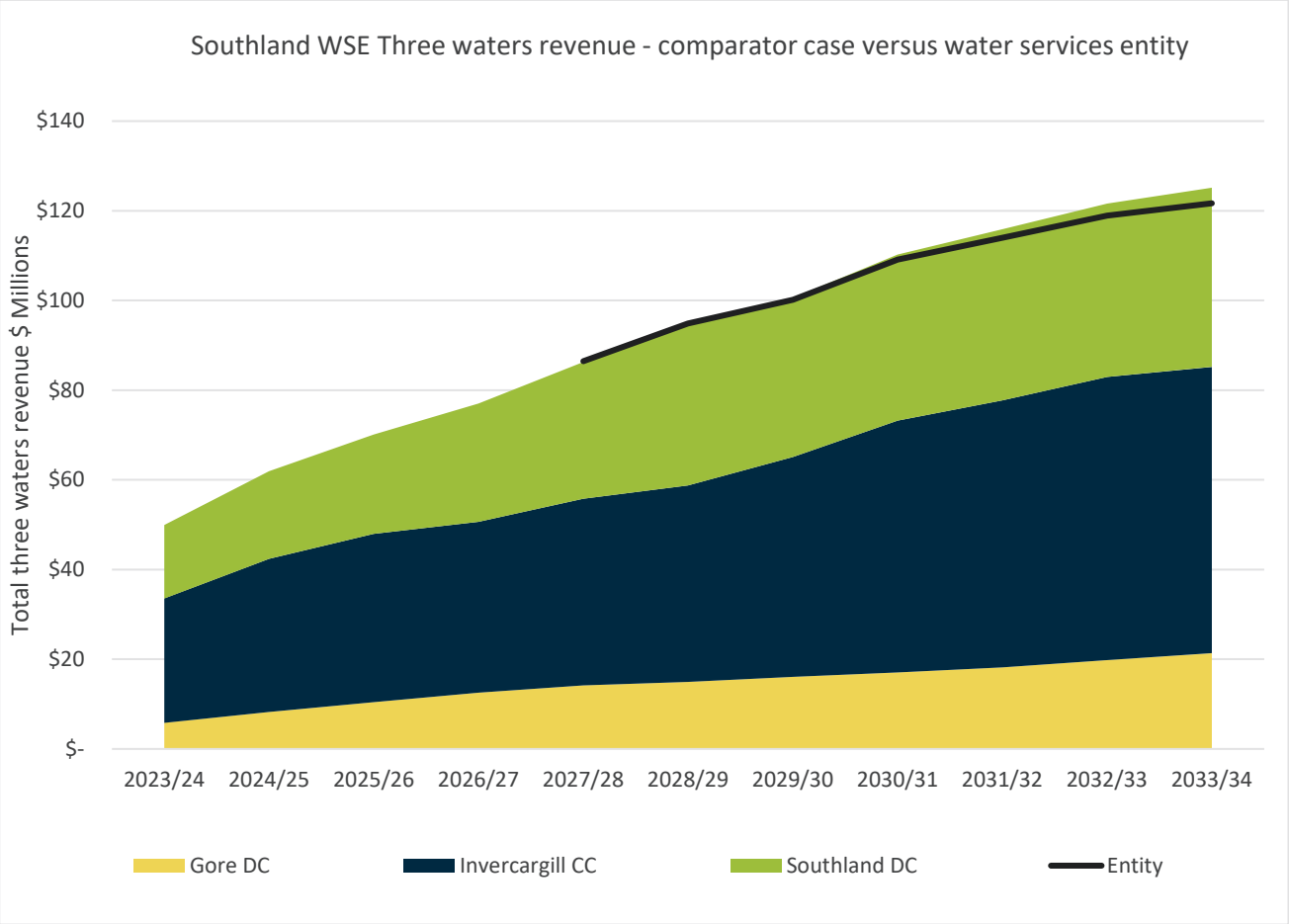
The chart is consistent with the Otago Southland Wide CCO in that it utilises higher leveraging than the combined councils. This means that the entity does not need to generate as much additional revenue to support its borrowing requirements.

Southland contributes the most debt to the combined CCO on establishment, with Invercargill contributing more debt over time.



Revenue

The chart below shows total revenue for a Southland Wide CCO compared to the combined three waters revenue of the participating councils.

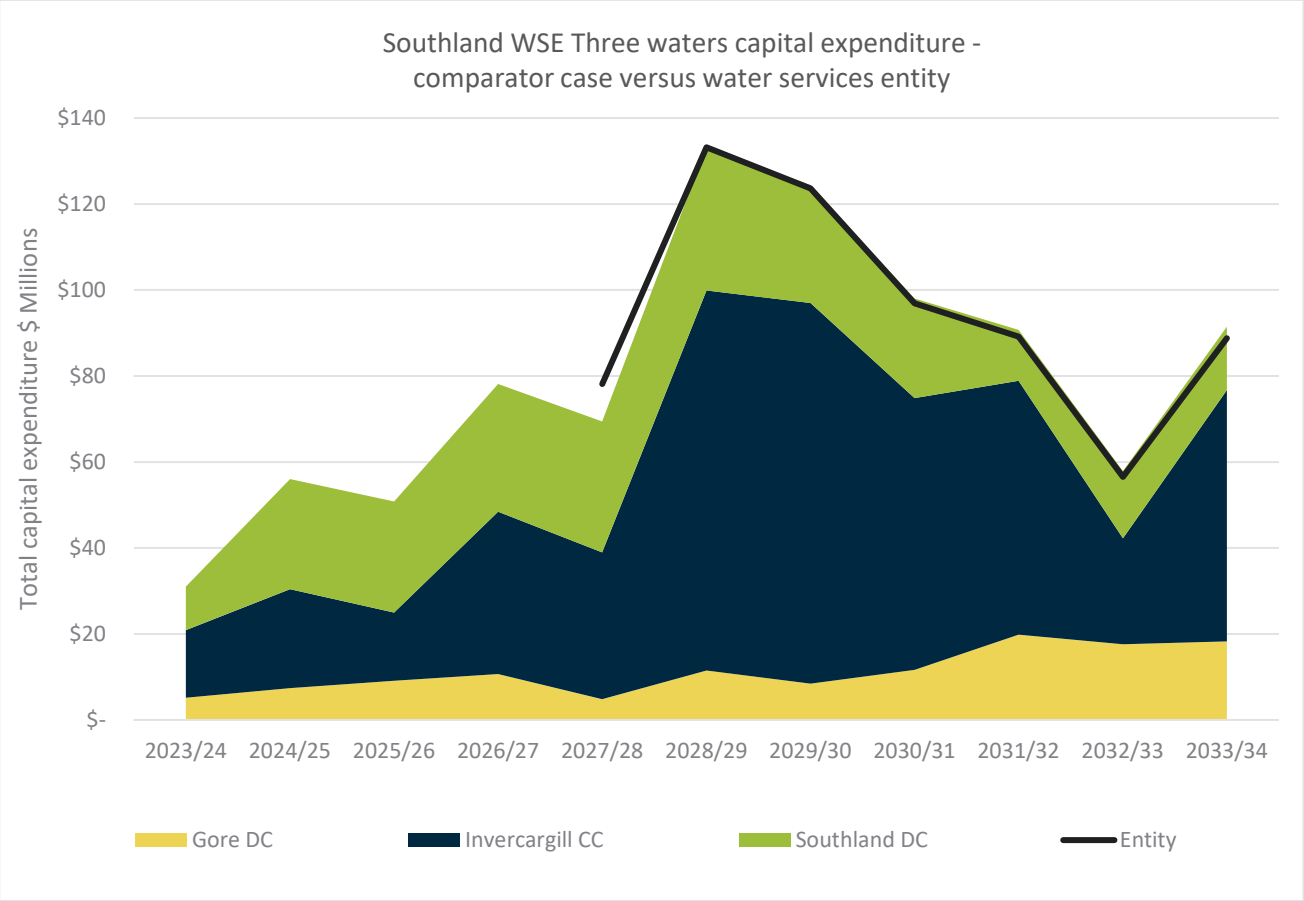


As with the Otago Southland Wide CCO, this CCO is able to leverage its balance sheet to a greater extent than individual councils. This means it is able to reduce its overall revenue requirements to support that debt, reducing charges to consumers compared to individual councils.

Invercargill contributes the largest share of the total revenue of the combined councils in this scenario, however the reduction in revenue requirements would be shared across all councils proportionally.

Capital expenditure

The chart below shows total capital expenditure for a Southland Wide CCO compared to the combined three waters debt of the participating councils.



As with the Otago Southland Wide CCO presented in the combined regions' report, the CCO has higher capital expenditure levels than the combined councils in its first year, reflecting the need to incur significant establishment costs[3].

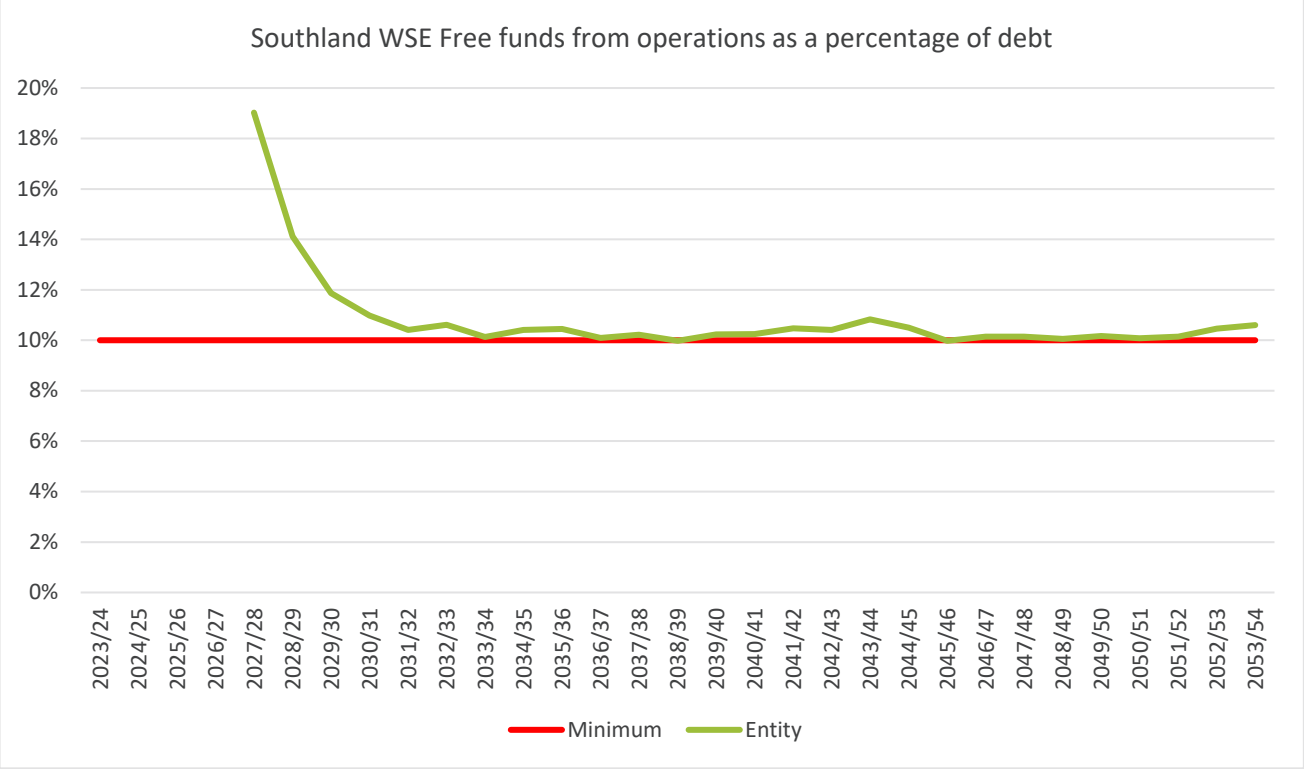
Invercargill contributes more than half the total planned capital works of the combined councils over the 2028/29 – 2031/32 period.

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

30 year borrowing profile

Our modelling assumes that the CCO will maintain an FFO to debt ratio of 10% over the long term. We note that as the economic regulation regime and the CCO mature it is possible that the entity may be able to become even more highly leveraged over time, should it so desire.

The FFO ratio adopted as a benchmark in our reporting is conservative but broadly in line with guidance published by LGFA in December 2024. We understand that it is likely that LGFA would provide flexibility in lending covenants in the case of an emergency.



Appendix Five – ICC Options analysis