Thinking for a better world.

Memo to Hurunui District Council and Kaikoura District Council on water reform options

10 February 2025

Executive Summary

Castalia is assisting Hurunui District Council (HDC), Kaikoura District Council (KDC) and Waimakariri District Council (WDC), (the North Canterbury councils) with modelling the financial implications of joint arrangements for councils' water services. This is part of the North Canterbury councils plan to prepare a Water Services Delivery Plan, as required by the Local Government (Water Services Preliminary Arrangements) Act 2024. Castalia completed financial modelling of several scenarios, including go-alone options and several joint delivery options.

Since submitting the financial analysis and an evaluation of each model, the three councils have had further discussions. It appears that WDC is unwilling to enter into a joint council-controlled organisation (CCO) or a management, operations and maintenance CCO owned by all three councils.

HDC and KDC are now exploring whether it is possible to work together to prepare a joint WSDP. HDC and KDC have asked Castalia to provide additional analysis of a two-council CCO, referred to as joint CCO, and compare this against their best go-alone option.

The key question for this memo is whether a joint CCO model is financially viable and will it provide HDC and KDC with safe, resilient, reliable, customer-responsive water services at least cost.

We recommend that HDC and KDC consider a joint CCO option

A joint CCO option has the lowest tariffs, best outcome for future council borrowing ability and best score on our evaluation matrix. Of the analysed options, a HDC-KDC water services CCO appears to be financially viable, and the most likely to provide HDC and KDC with safe, resilient, reliable, customer-responsive water services at least cost.

Tariffs are lowest under a joint CCO model, which appears financially sustainable

A joint water services CCO had the best financial modelling outcomes. The joint CCO would see each council contribute all water assets and it would raise financing independently of council. This provides the best outcome for each council's borrowing headroom.

Our financial modelling approach adopts a "no worse off" principle. This means that the customers in HDC and KDC's council areas only pay water tariffs that recover the costs of the services in those council areas. There is no cross subsidisation between councils. Nevertheless,

because of greater borrowing capability in a CCO and the ability to save some money from a joint approach, the tariffs are lowest. The tariff results are set out in the two charts below:

Figure 0.1: Hurunui—modelled tariffs under different scenarios

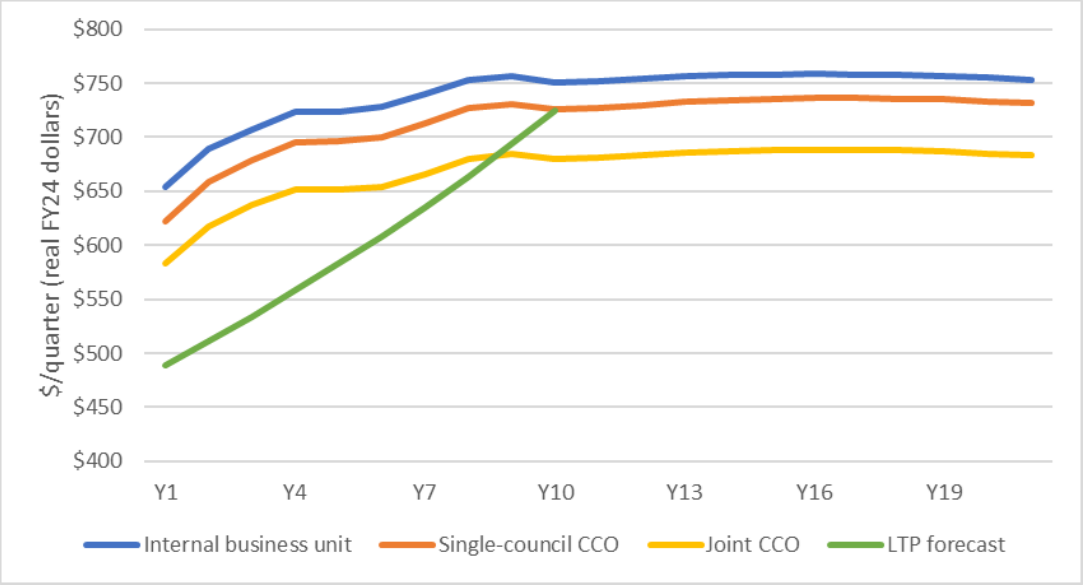
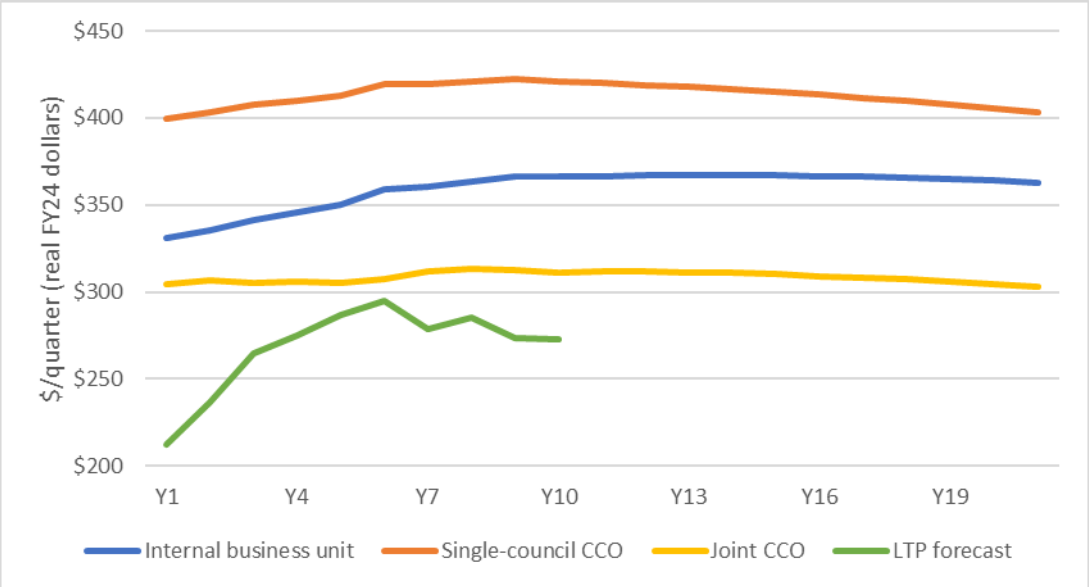


Figure 0.2: Kaikoura—modelled tariffs under different scenarios



Evaluation results suggest joint CCO model is best

Castalia's evaluation of the go-alone vs joint CCO options against six criteria used to assess water reform options suggests that a joint CCO is the best of the currently available options for HDC and KDC. A joint CCO leaves both councils flexible to future change: the CCO could accommodate additional councils (under the "no worse off principle"), or procure a third-party

to manage, operate and maintain the water services under contract following a competitive tender process. The CCO is also more likely to ensure management and operational capability is maintained, which is critical for resilience. Overall, the joint CCO option is most likely to ensure that water services are safe, resilient, reliable, and customer responsive at least cost.

1 Introduction

Castalia has been appointed to evaluate short-listed options for water reform for HDC and KDC, since determining that a joint option with WDC may not be possible. This memo evaluates the two basic options of go-alone (either as an internal business unit or CCO) or a joint HDC-KDC CCO. This memo is structured as follows:

- Key assumptions for the two models for water services are set out in section 2
- Evaluation criteria for available options are explained in section 3
- Financial modelling results are in section 4
- Evaluation results are presented in section 5
- Finally, our conclusion and recommendations are set out in section 6.

2 Two options for water services

We set out the two options, and the key assumptions that underpin them in this section. The two high-level options for water service provision are:

- Go-alone option, either:
  - Internal business unit of council
  - Single-council CCO
- A joint CCO option, where both councils transfer their water and wastewater council functions into a water services CCO. The CCO will deliver water and wastewater services to the residents of both councils.

2.1 Go-alone options

The go-alone options for each council are either run water services as an internal business unit or incorporate a wholly-owned CCO.

2.1.1 Internal business unit

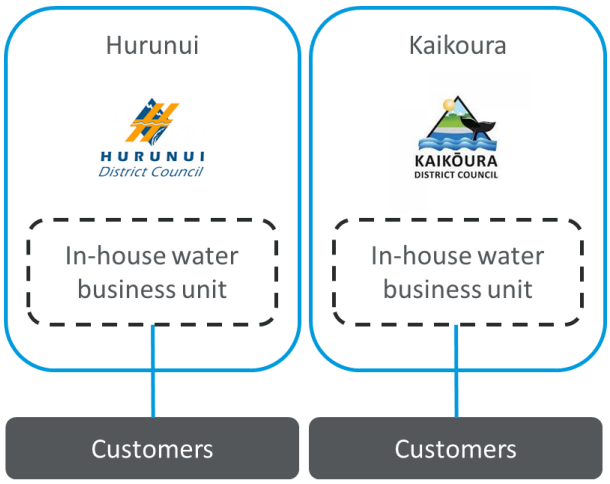
An internal water service business unit would be a department or operational team within the council that directly manages and delivers water services. It would have to be ringfenced, with separate accounts, revenues, and assets. This is the closest option to the status quo, as the councils all have some degree of ringfencing and separation already. In KDC's case, via the management contract with Innovative Waste Kaikoura Limited (IWK), which also provides waste management services.

Governance of the business would sit at the elected member level. This means elected members would be ultimately responsible for compliance with regulatory bottom lines. This includes potential liability for pecuniary penalties under Part 4 of the Commerce Act (subject to clarification in Local Government (Water Services) Bill).

Assets would be held on each council's balance sheet, and finance raised at the council level. This means borrowing for water investments would be constrained by the councils' ability to raise debt, and any relevant net debt-to-revenue covenants.

Figure 2.1 illustrates the structure of internal business units for each council.

Figure 2.1: Diagram of internal business units



Key assumptions about internal business unit

We make some assumptions about the additional costs of an internal business unit, compared to the status quo. This is because there will be additional regulatory compliance required under the Local Water Done Well legislation. Additional regulatory staff to ensure ring-fencing of activities and accurate reporting to Commerce Commission will be required. We assume 2 FTEs per council at a cost of $600,000 (including salary and overhead costs). We also assume there is a minor efficiency gain from regulation, compared to status quo of 0.20 percent.

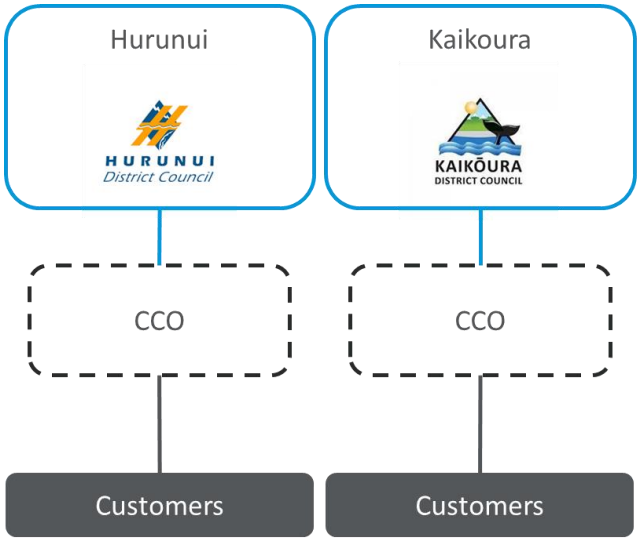
2.1.2 Single-council WSCCO

Under this option, each council would establish a wholly owned water services CCO. The CCO would manage, operate, and maintain the water infrastructure. It would hold the water assets on its balance sheet. Alternatively, a long-term lease of assets could be granted by the council (which retains ultimate ownership of assets) to the council-owned CCO.

The WSCCOs would be separate entities, with a board, and owned and controlled by their individual councils but operating with some degree of commercial independence. The councils would set performance expectations, which could be supplemented by management contracts to improve incentives and better define outcomes. However, the WSCCOs would have autonomy over day-to-day operations.

LGFA confirmed that it would consider a WSCCO with a board of majority independent directors eligible for its expanded lending programme (lending to WSCCOs at a net debt-to-revenue ratio of 500 percent). Figure 2.2 illustrates the structure of single-council WSCCOs for each council.

Figure 2.2: Diagram of single-council WSCCOs



Under the go-alone option each council will continue to deliver water services to residents in their council area. As set out in Castalia's earlier reports, and in advice from YuleAlexander Limited, this does not mean that the status quo operating model can continue. HDC and KDC will have to meet the requirements of current and future expected Local Water Done Well legislation—Local Government (Water Services Preliminary Arrangements) Act 2024 and Local Government (Water Services) Bill and future economic regulation.

Each council will also have to decide on the structure and operating model for their go alone business, either an internal business unit of council, a wholly-owned Water Services CCO (WSCCO), or some other model (for example, contracted out to a third party, or a council-owned CCO like IWK).

Key assumptions for single-council CCO

There are some additional costs with a single council CCO:

- Board members for CCO: We assume three board members, remunerated at $25,000 to $35,000 per annum would be required
- One-off set up costs are assumed to cover legal matters, any initial hiring costs, setting up systems and processes and any space leases. We assume councils' existing water sector staff and assets are transitioned and used to minimise costs:
  - HDC: $500,000
  - KDC: $300,000
- Additional regulatory staff are required: 1-2 FTEs per CCO which equates to $400,000 to $800,000 in additional costs (salary plus overheads)

There are also some expected efficiencies that should emerge from a single-council CCO, compared to internal business unit set out in the table below:

Table 2.1: Cost savings from efficiencies, compared to LTP forecasts

Factors	Efficiency savings type	Time period	Single-council CCO assumption
Capex cost efficiency	Fixed savings	Fully in force after 5 years	1.5%
Staff cost efficiency	Annual compound	Begins after 3 years	0.50%
Water operations cost efficiency	Fixed savings	Fully in force after 5 years	2%
Other overhead cost efficiency	Fixed savings	Fully in force after 5 years	2%

2.2 HDC-KDC joint CCO option

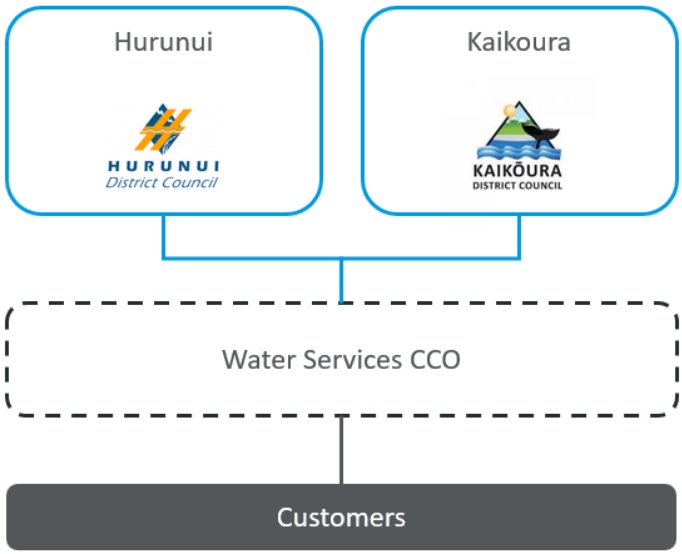
Under a joint model, the Hurunui and Kaikoura councils form a joint CCO and deliver water services to the residents of both councils. We have developed a joint-CCO option that is workable and financeable and ensures equity between HDC and KDC. The joint CCO option has the following design features:

- A newly incorporated company (CCO) with at least a majority of independent directors to qualify for LGFA financing
- Ordinary shareholding is in proportion to the net assets each council contributes
- Special voting shares could be used to determine voting rights on key matters (although this is not essential to the option design at this stage)
- All water-related assets would be transferred to the joint CCO (although a long-term lease is possible)
- All water-related debt would be transferred to the joint CCO
- For the purposes of billing, the joint CCO will record the value of assets in each council in separate accounting codes so that customers will pay only for the assets required for their council area

The CCO would then manage, operate, maintain, and finance water infrastructure across the three councils. This shared CCO would act as a unified entity, consolidating resources and operations to deliver services.

Figure 2.3 illustrates the structure of a Joint CCO between HDC and KDC.

Figure 2.3: Diagram of a Joint CCO



Key assumptions for a joint HDC-KDC water services CCO

We make several key assumptions for the joint CCO option. We adopt a "no worse off" assumption. This means we assume that the Joint CCO would keep three asset and debt accounts for each council. Customers would pay the depreciation and return on assets related to their council's specific asset and debt account. Furthermore, the joint CCO would keep separate accounts to split opex costs where they are incurred. This change ensures that customers are paying closer to the cost of supplying them, discrepancies in debt and future capex are not cross-subsidised, and no council is worse off compared to their go-alone position.

The jointly owned CCO would also have access to financing up to a net debt-to-revenue ratio of 500 percent. The joint CCO would also be able to exploit some economies of scale, share overheads and compliance costs over more customers and improve the competence of management and operations (operating as a larger organisation).

Additional costs of a joint CCO

We assume additional costs from the joint CCO. We generally assume that both councils will seek to minimise transition costs and utilise existing systems, and transfer employees and assets (such as vehicles, any leases and so on) to the CCO. We assume existing council office space and facilities will be leased at cost to the new CCO, minimising set-up costs.

Nevertheless, some additional costs will need to be met:

- Board members: Five board members remunerated at $35,000 each
- One-off CCO set up costs, including legal advice, and so on: $1,000,000
- Additional regulatory staff of 3 FTEs at $600,000 to $900,000 cost (salary plus overheads)

Cost savings and efficiencies from a joint CCO

Key cost savings assumptions for the CCO are set out in the table below:

Table 2.2: Cost savings from efficiencies, compared to LTP forecasts

Factors	Efficiency savings type	Time period	Joint CCO assumptions
Capex cost efficiency	Fixed savings	Fully in force after 5 years	2.5%
Staff cost efficiency	Annual compound	Begins after 3 years	1%
Water operations cost efficiency	Fixed savings	Fully in force after 5 years	5%
Other overhead cost efficiency	Fixed savings	Fully in force after 5 years	10%

3 Relevant evaluation criteria

Castalia has developed a framework for assessing water reform options. We have used this framework in advice for several councils, Local Government New Zealand, Communities 4 Local Democracy, and in advice to DIA. The framework consists of six elements or "parameters for success" towards achieving the ultimate objective of water reform:

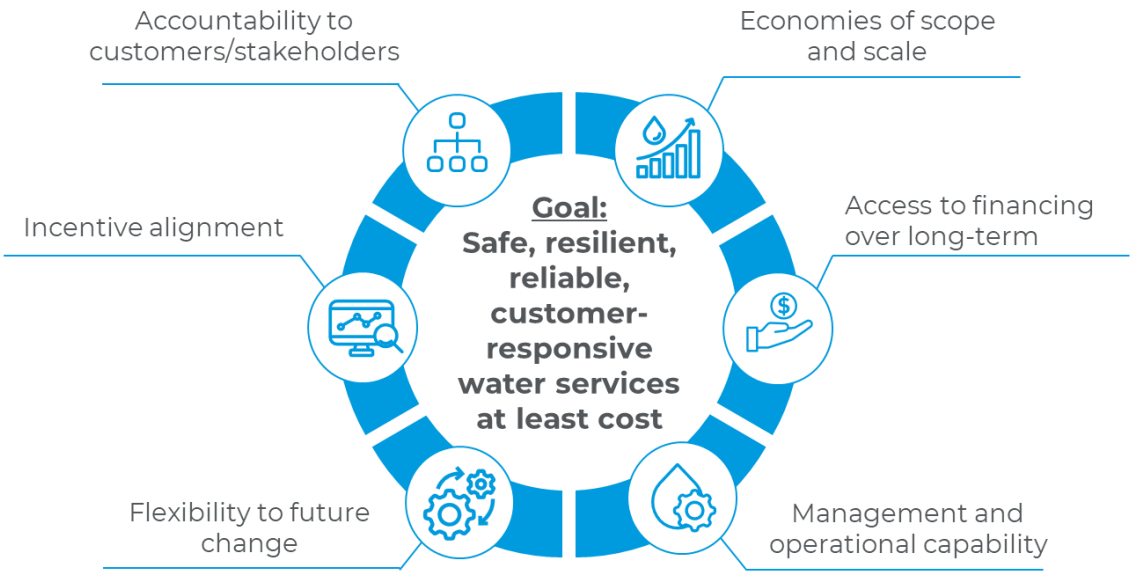
> Safe, resilient, reliable, customer-responsive water services at least cost.

We explain the framework in detail below, followed by guidance on how each parameter relates to achieving the overall objective.

3.1 The framework

The framework is outlined in the following diagram. We then describe each element in detail below.

Figure 3.1: Decision-making framework for evaluating water reform options



Source: Castalia, based on advice to LGNZ and DIA

3.1.1 Economies of scope and scale

Economies of scale and scope can provide benefits in the delivery of water services. However, it is important to assess the specific facts of the reform and if the actual economies being generated (if any) are from the reform interventions.

When a firm's scale of production leads to lower average costs, there are economies of scale. The relevant output for assessing the existence of economies of scale in a structural reform is

the number of connections: Does an increase in the number of connections lower the average cost of provision? As the number of connections increases, there may be savings in operating costs (for example, corporate head office services) on a per-customer basis. However, this is likely to be a small proportion of the total cost per customer.

Economies of scope are proportionate cost savings from producing two or more distinct goods. In water services this could be a cost saving from one service provider delivering both the clean drinking water and wastewater services. Economies of scope in water services are more often assumed than empirically verified. Economies of scope also exist between water services and other municipal services. This can be true for both small and large entities.

3.1.2 Access to financing over long-term

Water providers require access to the lowest risk-adjusted cost finance available on terms that align with their capital and operating cost needs. The market sets the cost of finance and reflects the market's assessment of the provider's ability to earn revenues to repay its lenders.

Water services involve high-cost assets with long lives and lumpy investments. Financing instruments like bonds need to reflect a long-term investment horizon. The water services of many councils in New Zealand are constrained in accessing finance due to the overall indebtedness levels of the council's consolidated balance sheet and caps imposed by credit rating agencies that, if breached, would increase the cost of debt. HDC is currently at the limits of its borrowing capacity due to these caps. Castalia's 'access to financing parameter' assesses reform options for the extent to which water service providers can access finance that reflects the riskiness and revenues of the water business and its projects alone. Ways to maximise financing access include:

- Establishing an appropriate ownership structure. Most councils in New Zealand provide water services as part of the council's normal business, thus constraining access to finance for water services due to the overall indebtedness of the council's consolidated balance sheet. Separating water services from the council balance sheet can help to unlock additional debt limits, specific to the water infrastructure. The LGFA announced a financing facility available to qualifying Council-Controlled Organisations (CCOs) that meet certain requirements.
- Maximise financing options through scale. Larger organisations have larger balance sheets and access to more funding and financing. This enables the organisations to better sequence projects in a way that optimises between financing and timing of expenditure. This can allow service providers to achieve better access to financing for long-term investment programs.

3.1.3 Management and operational capability

Capable and sophisticated management and operations happen when management meets organisational objectives, uses available resources efficiently, maintains high levels of employee performance and professionalism, and provides excellent service to customers. This is essential to safe, resilient, reliable water services at least cost.

Small councils, and councils located in remote areas, have challenges attracting and retaining the skilled staff. Water service providers with poor management and poor remuneration can also struggle to lift management and operational capability.

Management and operational competence involve basic safety matters, such as ensuring filters are changed or chlorine drips discharge at the correct rate. Competence can be correlated to scale, competition between water services, outsourcing, regulatory enforcement, and profit incentives. The delivery entity should be evaluated according to the likelihood and extent to which the competence of management and operations is improved. There are several ways to achieve this, not all of which necessarily follow from increased size. For example, contracting out of key functions can improve capability.

3.1.4 Flexibility to future change

Flexibility and adaptability to change following new information are desirable in water service providers. Societies needs and expectations regarding water services are always changing. For example, changes to population will affect investment needs. Public opinion about how water and wastewater is treated can also lead to the need for change. These changes or new information require water services to adapt in response.

Water service providers that are closer to customers can generally adapt more easily due to better local knowledge and understanding. Appropriate institutional settings can also ensure that service providers can readily adapt to customer needs over time. Castalia's criteria suggest that institutional settings should be assessed on the extent to which they are responsive to change and new information.

In the Local Water Done Well context, flexibility to future change means being able to adapt as the regulatory settings change, or as opportunities emerge for councils to work together.

3.1.5 Incentive alignment

This element refers to the institutional settings that incentivise those charged with governance and management of the water service to make decisions that achieve the overarching objective. The incentives can be short or long-term. Ideally, both short and long-term incentives are aligned with the objectives.

Short-term incentives of governance and management can be aligned via performance contracts and financial targets. Institutional incentives generally arise from accountability to shareholders. Long-term incentives can also be aligned with more care.

Long-term incentives are a challenge in any institution, especially where assets have long lives, and investment needs span decades. One key issue is ensuring sufficient long-term capital investment. Institutional settings, such as ownership interests or regulation, need to ensure that management is incentivised to make costly capital expenditures even where the benefits will not produce immediate returns. Adequate regulation can also ensure long-term incentive alignment via statute.

3.1.6 Accountability to customers/stakeholders

There is a cost and quality trade-off in providing water services. Service providers must remain accountable to customers for where the service sits on the cost and quality continuum. Customer accountability allows customers to act on concerns and receive the level of service they want for a given price. Water service quality can be highly variable, even above safe minima.

Consumers also want to ensure that water services are provided at a fair price. It is, therefore, important that the cost/quality trade-off is made by an entity or in a way that provides

accountability to customers. Customer accountability can be achieved through local government (current model), independent regulators, regional/council-owned entities, and direct ownership by consumers. Various institutional options exist to give customers and communities accountability for price and quality preferences in water services. The institutional design options need to be evaluated to determine the extent to which they are likely to be effective in the New Zealand environment.

In New Zealand, accountability to hapu and iwi is also important. Hapu and iwi have significant rights and interests in waterways, other water sources and the receiving environment for treated wastewater (both land and water discharge). Many councils have obligations of consultation and have specific agreements that relate to natural resources affected by water service provision.

4 Financial modelling results

Castalia modelled the two Go-Alone options, IBU and single-council CCO, for each council, as well as a joint CCO of both councils. The modelling found that the joint CCO option resulted in both the lowest tariffs for council residents and the lowest debt levels for councils. At a high level, Hurunui benefits from Kaikoura's low debt levels, while Kaikoura benefits from Hurunui's larger population to spread its revenue requirement across in the form of tariffs.

4.1 Tariff implications

We modelled the tariff implications of each option: internal business unit, single-council CCO and joint CCO for each council. We compared tariffs to the forecast water rates assumed in councils' long-term plans (LTPs).

The key takeaway from the modelling is that both councils benefit from the joint CCO's cost efficiencies. KDC benefits from having a larger population to spread its revenue requirement across. For HDC, the joint CCO's efficiencies of scope and scale reduce its revenue requirement below the cost of a single-council CCO. For KDC, the joint CCO's division of operating expenses significantly reduces their revenue requirement and per-household tariffs.

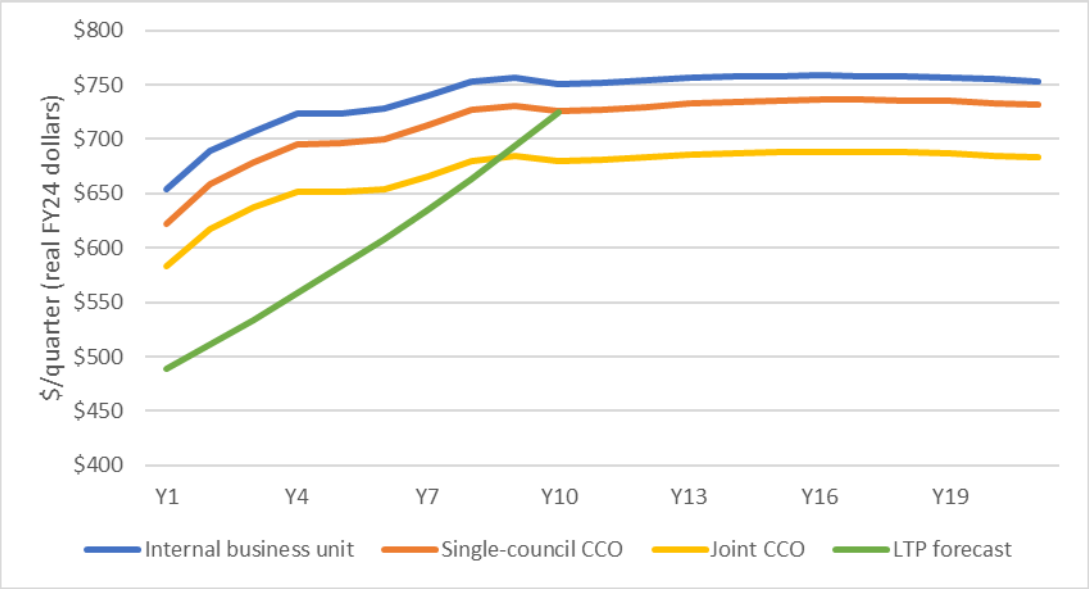
Hurunui tariff implications from potential reform options

HDC's revenue requirement is spread across its population in each scenario, meaning reductions in the revenue requirement translates to reductions in water tariffs paid by Hurunui residents. The joint CCO carries marginally higher staff costs than the two Go-Alone scenarios, but joint CCO savings from operating expense efficiencies drive down HDC's total revenue requirement, creating the tariff reductions reflected in Figure 4.1.

The joint CCO's initial regulatory asset base (RAB) requirement is $50 million to stay in compliance with the LGFA's 500 percent net debt-to-revenue covenant for qualifying CCOs. KDC's low debt levels mean it requires zero initial RAB, allowing for HDC to "contribute" all $50 million of the initial RAB. The return on capital allowance and depreciation allowance are divided between HDC and KDC proportionate to their contributions to the RAB. As a result, HDC is allocated 100 percent of these two initial allowances, decreasing to 91% by the end of the modelling period. While this does mean HDC pays higher tariffs than a population-proportionate split, it is more equitable due to KDC not needing debt relief as much as HDC does.

HDC's water tariffs are forecast to plateau after FY2033. This is due to Hurunui's compounding population growth outpacing the revenue requirement growth, causing the eventual decline in per-household tariffs in the latter years of the modelling.

Figure 4.1: Hurunui tariff comparison

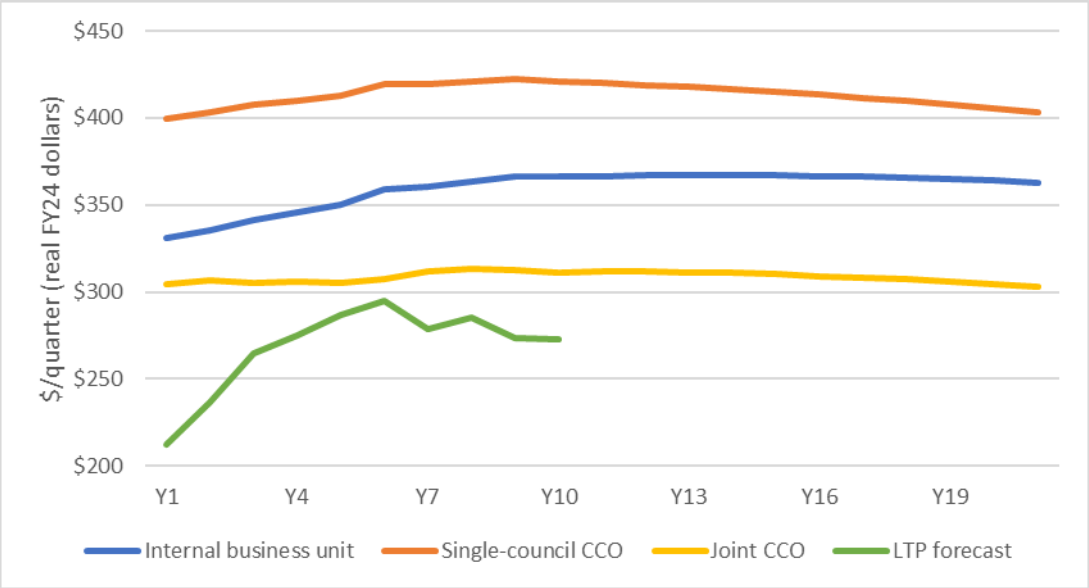


Kaikoura tariff implications of reform options

KDC's low debt levels and small contributions to the RAB mean that most of its revenue requirement is made up of opex (staff costs and overhead costs). The total operating expense allowance of the joint CCO is divided up by population, and Kaikoura makes up between 20 and 23 percent of the total population of the two councils over the modelling period. This allows Kaikoura to spread the increased opex of the joint CCO by population, which benefits Kaikoura; KDC's revenue requirement under a single-council CCO is more than $800,000 greater than their revenue requirement under the joint CCO.

The forecast decline of per-household tariffs after year 10 is due to population growth outpacing revenue requirement growth. Per-household tariffs for KDC under the three reform options are displayed alongside LTP forecasts in Figure 4.2.

Figure 4.2: Kaikoura tariff comparison



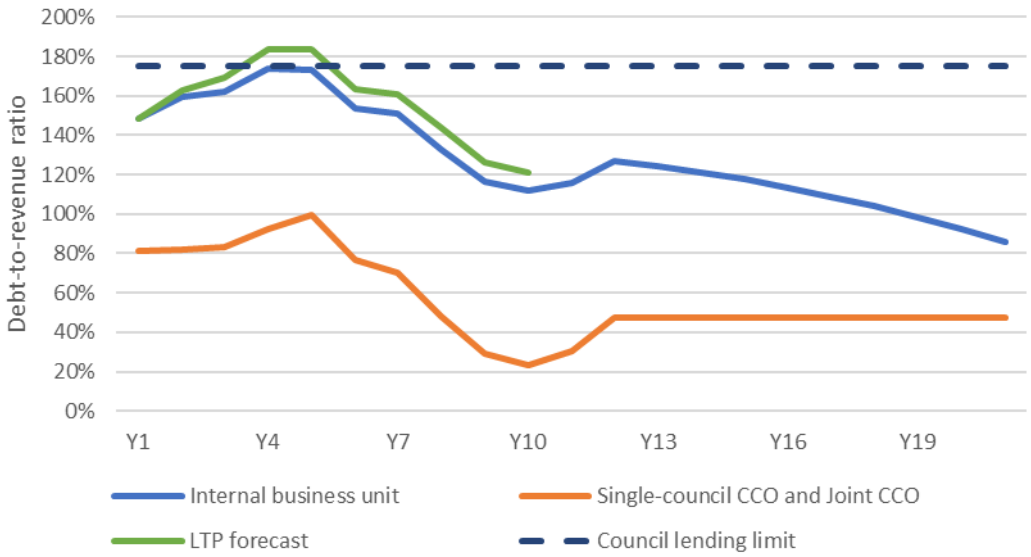
4.2 Remaining council debt implications

The councils' ability to transfer debt to either a single-council CCO or joint CCO benefits both councils, but HDC benefits more from this debt transfer. The LGFA imposes a 175 percent net debt-to-revenue covenant on councils and a 500 percent net debt-to-revenue covenant on qualifying CCOs; the analysis below explains how the CCO options interact with these covenants.

Hurunui council debt impacts from reform options

HDC's LTP data indicates a two-waters debt balance of over $47 million at the end of FY2024. Under a council internal business unit model, HDC would require an initial RAB of $83 million for revenues to remain high enough for HDC stay in compliance with the 175 percent covenant. This would pass through to consumers in the return on capital allowance, increasing household water tariffs. The single-council CCO and joint CCO both allow the council to offload this debt onto the CCO, adding 67 percent of headroom below the covenant and reducing the initial RAB requirement to $56 million and $50 million respectively. As seen below in Figure 4.3, HDC is well below the covenant over the modelling period under the single-council CCO and joint CCO.

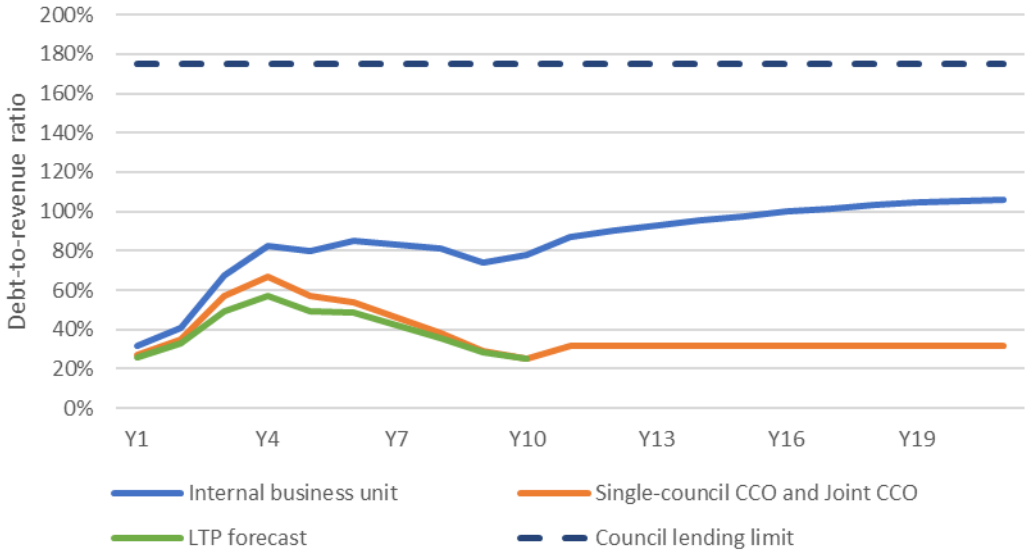
Figure 4.3: HDC net debt-to-revenue ratio comparison



Kaikoura council debt impacts from reform options

KDC's council debt is negligible and would not require a CCO solution to remain in compliance with the 175 percent net debt-to-revenue covenant. However, KDC can still benefit from the debt transfer to either a single-council CCO or joint CCO. As indicated by Figure 4.4, council debt-to-revenue slowly grows after year 11 as new borrowings outpace IBU revenue. However, this debt remains off KDC's books under the CCO options, leaving the council's debt-to-revenue levels unimpacted by the water business. It would also save hundreds of thousands of dollars on interest payments that will be incurred by the CCO instead of KDC.

Figure 4.4: Kaikoura DC debt-to-revenue ratio comparison



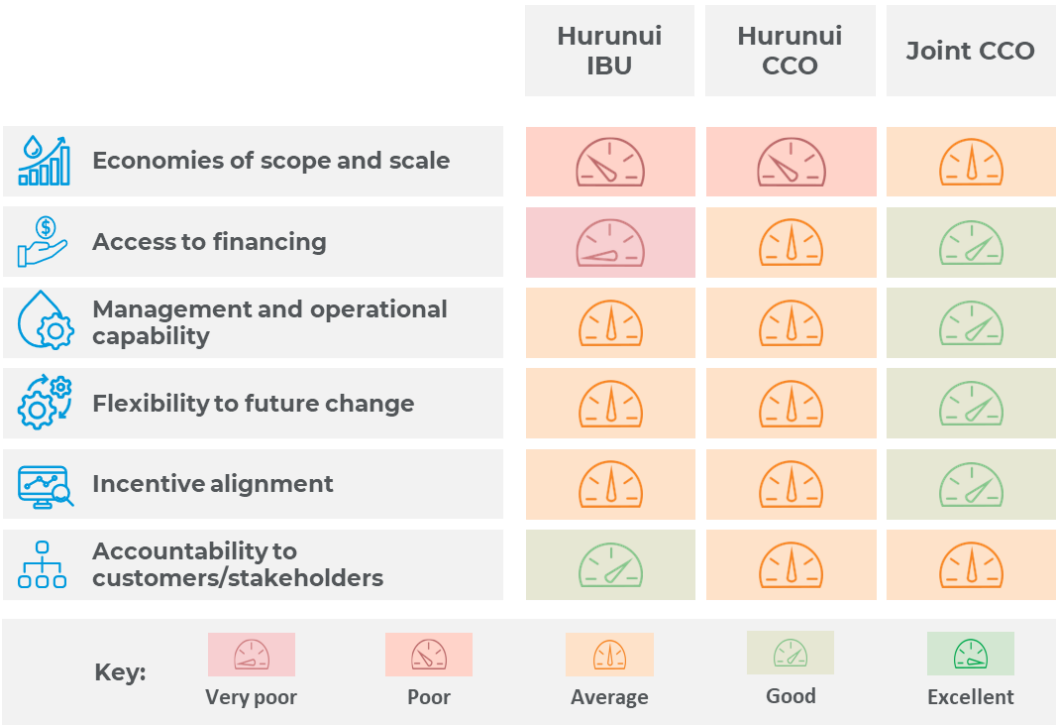
5 Evaluation results

We set out the results of the evaluation below.

5.1 Hurunui District Council evaluation results

We set out the results of our evaluation according to the framework in section 3 for HDC below:

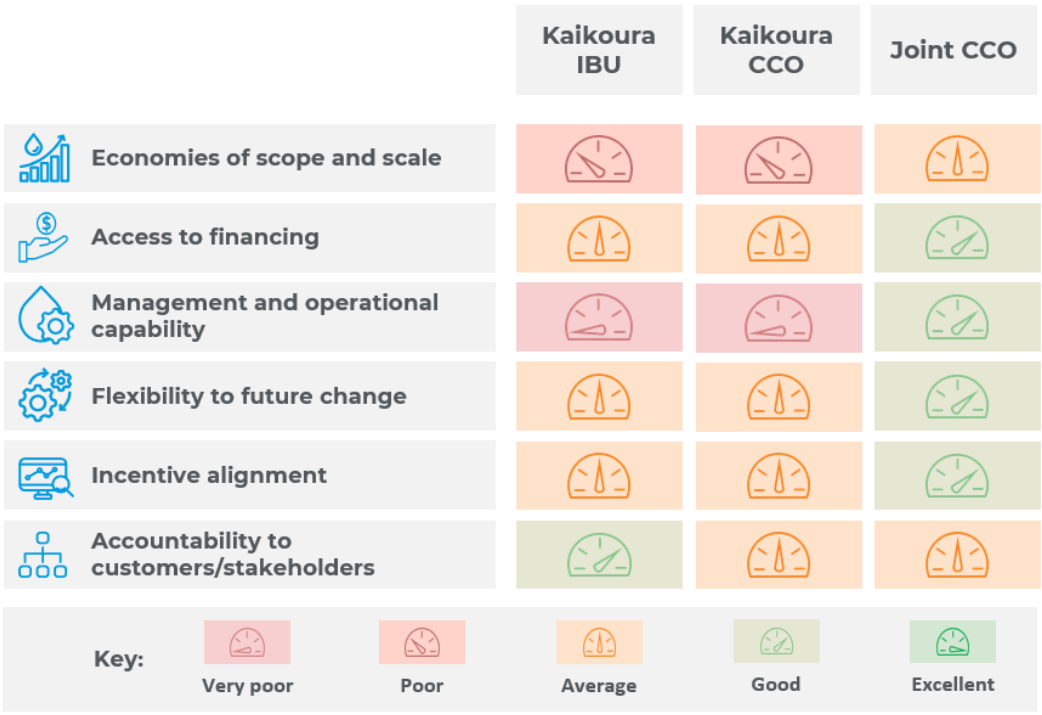
Figure 5.1: HDC evaluation results



5.2 Kaikoura District Council evaluation results

We set out the results of our evaluation for KDC according to the framework in section 3 below.

Figure 5.2: KDC evaluation results



6 Conclusion and recommendations

Of the options evaluated, a joint CCO appears to provide the greatest benefits to both HDC and KDC.

Go-alone options might give HDC and KDC more direct control over water services. However, with economic regulation (Commerce Commission), water quality regulation (Taumata Arowai) and increased focus on environmental outcomes (ECan), this “control” is limited anyway. Also, go alone options have higher operational costs due to fragmentation, limited economies of scale, and duplication of resources. As a larger entity, the joint CCO could also secure better terms for a competitively procured third-party contract for management, operational and maintenance services, compared to go-alone options.

We therefore recommend that HDC and KDC consider a joint CCO option as the best approach The key points are:

- Tariffs are lowest for both councils under a joint CCO. Modest cost-efficiencies, better balance sheet structuring, and sharing of borrowing capability across both councils lowers tariffs
- Economies of scale are improved, compared to go-alone options
- Access to financing is greatly improved for both HDC and KDC. One key benefit of forming a WSCCO is the enhanced ability to access financing, particularly through the LGFA. Qualifying WSCCOs will have access to much higher net debt-to-revenue limits

through the LGFA that councils–likely up to 500 percent of their revenue. Thus, they will have far greater financial flexibility to invest in large-scale infrastructure projects

- Management and operational capability can be improved from a joint, dedicated water services joint CCO.
- Flexibility to future change is preserved under a joint CCO. The CCO is small enough to change as new information emerges, and ensure the water services remain resilient. For example, the joint CCO:
  - Could admit one or more additional councils in future (expanding the CCO)
  - Could competitively procure third-party management, operational and maintenance services under a contract. The joint CCO would have a much stronger negotiating position than if each council went alone
  - Increases resilience for the two councils, allowing for them to share environmental and infrastructure risks and reduce the impacts of adverse events.
- Incentives of board and management can be better aligned with the regulators' requirements and the interests of consumers
- The joint CCO may be slightly less accountable to customers, however, with robust governance and oversight, plus regulatory monitoring, the joint CCO could be just as accountable to customers as go alone options.
- Finally, the joint CCO aligns with the Government's expectations for the sector and may provide strategic benefits in future (for example, in relation to regional deals).