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Transforming water services into utility businesses

October 2024

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Under Local Water Done Well (LWDW), water services will have to operate more like sophisticated, independent utility businesses

In this presentation, we aim to provide you with an:

- Understanding of the requirements under the LWDW program
- Framework for thinking about how to transform current operations into sophisticated utilities
- Concrete next steps for your councils to take

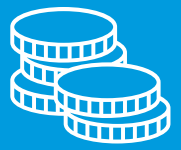
Topics we will cover today

1. 

Principles of utility thinking

2. 

Economic regulation

3. 

Financing the business

4. 

Delivery vehicle options

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Trade-offs for councils

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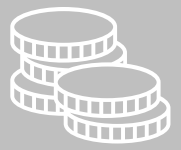

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Introduction to Utility Thinking

Definition of 'utility thinking':

Efficiently delivering water services at a **defined service quality level** (aligned with regulatory standards), in exchange for **tariffs paid by customers** that are **set by a regulator** to be economically efficient

Structure under 'utility thinking'	Under LWDW, Water Service Providers (**WSPs**) are to be structured and operated like corporatised utilities, rather than public services. WSPs will change to look more like electricity or telecom utilities. This will require a fundamental change in how WSPs behave and think.
Accountability under 'utility thinking'	WSPs will be directly accountable to customers, regulators, and councils. WSPs' accountability to councils will differ from current systems – focusing on accountability of strategic vision and leadership rather than daily operations and funding

Three main components of Utility Thinking

Cost-reflective tariffs	▪ Customers will pay tariffs based on the services they receive. ▪ These payments are expected to cover the full cost of service delivery, including both operational and capital expenditures. ▪ This contrasts with what some councils are currently doing; funding services through rates and taxes without clear alignment between charges and costs
Service and performance obligations	▪ WSPs must meet strict service and performance standards ▪ Commerce Commission regulation will ensure services are reliable and efficient, and that tariff levels align with the quality of services provided ▪ This introduces the concept of a service obligation, similar to other utilities, where the provider is accountable for maintaining a set level of service
Sustainable and efficient financing	▪ Water organisations or councils will borrow against the projected cashflows from tariffs to fund necessary upgrades and expansions ▪ Revenues are 'ringfenced', meaning it must be used solely for water services ▪ WSPs are incentivised to finance efficiently as would a corporatised private firm

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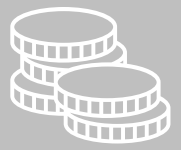

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Requirements of an economic regulation regime

Although Bill 3 is not yet published, it's clear that **WSPs must achieve financial self-sufficiency.**

The Commerce Commission will require that WSPs' revenues adequately cover 'costs'.

This means economically efficient costs as defined by standard regulatory theory. This includes concepts such as:

- **Testing costs for efficiency** (for an assumed level of service quality), and only passing on efficient costs to customers
- **Building Blocks Model** of calculating economic costs
- **Intergenerational equity**
- **Marginal pricing**
- **Incentives** being aligned with efficient management

Introducing the Building Blocks Model

The Building Blocks Model (BBM) is a framework used by the Commerce Commission to regulate costs and tariffs (water rates). The Commission will:

1. Determine what costs are efficient for the WSP to incur
2. Input the efficient costs into the BBM formula, which calculates the revenue the WSP collects from customers
3. In time, review whether the distribution of the collection of revenue among customers is efficient and equitable

The Commission is likely to adopt the BBM for several reasons:

- It is already widely used and accepted in New Zealand's electricity, gas, telco, airports sectors
- It is a global standard in the regulation of water utilities and other monopoly sectors
- It effectively addresses the issue of under-investment in New Zealand's water sector, promoting sustainable and adequate investment

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BBM revenue formula

Total tariff revenue	This is the total revenue to be collected from customers. How this revenue is divvied up is dealt with separately.
=	
OPEX allowance	Operating expenses are directly recovered in the year they are incurred through this allowance.
+	
Regulatory depreciation allowance	This allowance pays WSPs for past investments. This revenue can then be used to reinvest in the business to replace equipment as it depreciates
+	
Return on capital allowance	The WSP receives an investment return based on the total value of the invested assets and a regulated Weighted Average Cost of Capital (**WACC**). The WSP can use these funds to expand, give dividends to the council, or provide rebates to customers.
+	
Tax allowance	This allowance ensures the WSP is left whole after taxes. This will only apply to some corporate structures and councils

BBM recovery of investments in assets

Status quo:

Ratepayers generally pay for the **cash cost** of capital investments, sometimes with some financing

Example: a council incurs a capital investment cash cost of $100 – it decides that $20 of that is paid through debt, and $80 is collected from customers in the same year

Economic regulation:

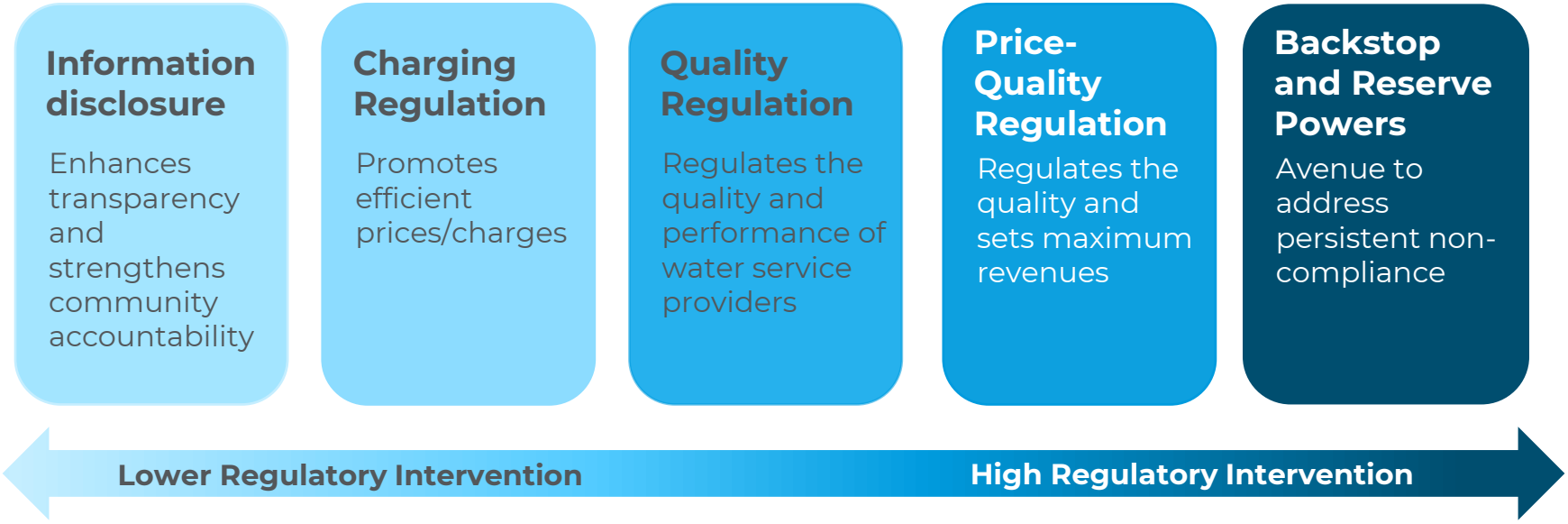
WSPs should recover the cost of capital investments from customers **over the asset's lifespan.**

Example: the WSP invests in an asset with a 50-year useful life – customers will pay 1/50 of the initial capital cost annually over the next 50 years

In time, the Commerce Commission may restrict prices from being set uniformly across a wide region – as it has done in the electricity sector. This restriction may be introduced so customers pay for the costs more directly associated with providing them with water.

The spectrum of ComCom's interventions

The Commerce Commission is likely to impose a graduated set of requirements on WSPs to enforce economic efficiency in the WSPs' costs and in how the WSPs charge customers:



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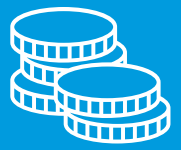

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Overall goals for financing

Financing under utility thinking needs to be:

- **Efficient:** provides the lowest overall cost of capital (debt and equity)
- **Equitable:** repayment of financing is done equally across the generations who use the assets
- **Sustainable:** WSPs should be able to manage their debt without excessive risk

Status quo thinking

- Setting revenues to meet cash capex needs
- Aversion to debt at some councils

Utility finance thinking

- Matching financing cost with economically regulated revenues
- Maintaining a capital structure that is economically efficient, sustainable, and secure

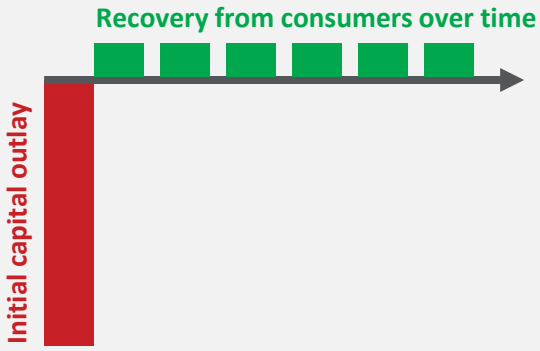
Cashflow matching one asset investment

Economic regulation dictates when a WSP will be able to recover revenues from the investment in an asset (depreciation allowance)

Given this, the WSP will need to move the timing of its cash costs to also match the revenues (and the asset's lives)

WSPs will need long-term equity and debt financing to turn the initial cash outlays for capex projects into matched cashflows

Without financing, WSPs face significant cashflow issues



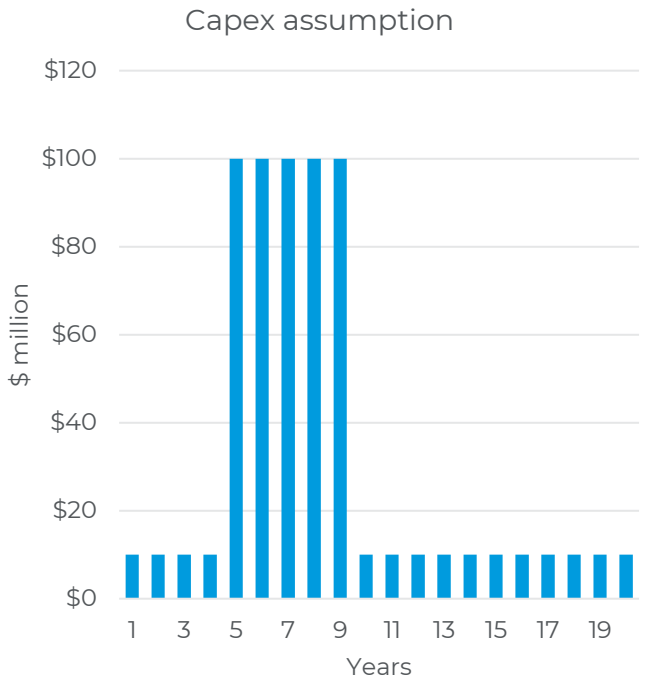
With financing, the outlays and revenues can be balanced

Example: WSP cashflows and revenues

An example council has a significant capex requirement in the coming years to catch up on past underspending. After this period of higher capex, the council expects capex to return to a lower baseline level

Assumptions:

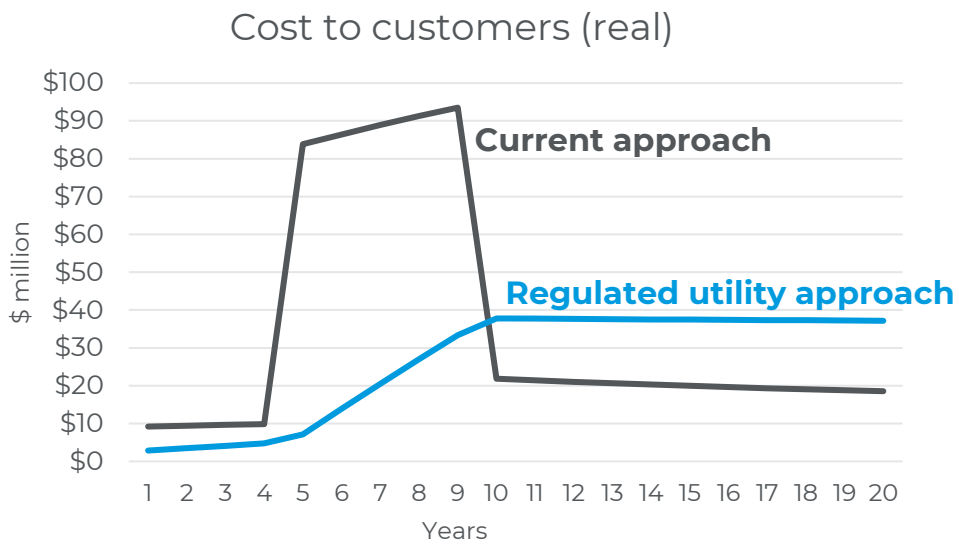
- **Long-term average capex:** $10 m per annum
- **Short term capex need:** $100 m p.a. for 5 years
- **Interest cost:** 5%
- **Average asset life:** 50 years
- **Current approach to financing:**
  - 80% of the cost of capex is directly paid for in the year it is incurred
  - 20% of the cost of capex is covered by debt, which is then paid back over time



Result: cashflow matched financing

Under the current approach:
The increased capex program causes a price shock during the investment period, and another downward price shock at the end of the period.

Under regulated utility approach:
The increased capex program lifts long-term costs, but does so smoothly, without shocks, and without intergenerational inequities



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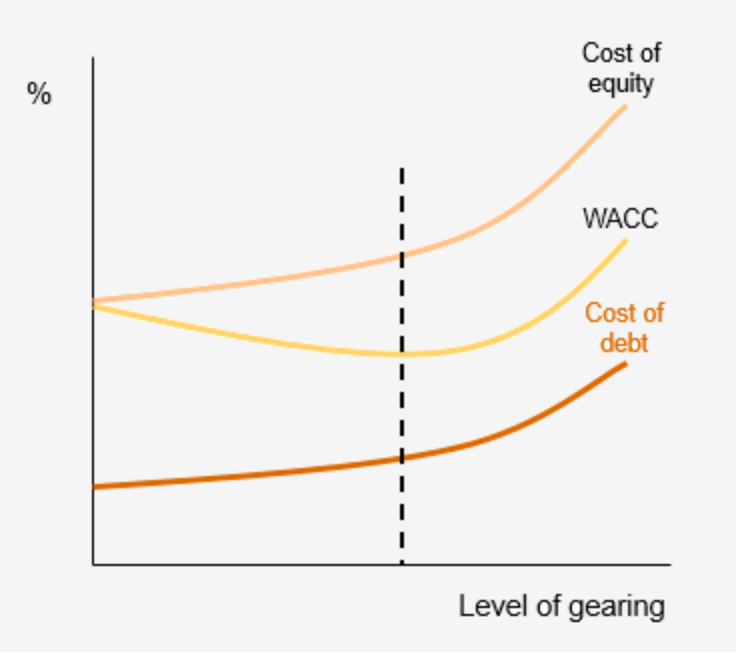
Debt is economically efficient

While it may be counterintuitive, **it is a fundamental principle of economic theory that debt is cheaper than equity.**

This principle considers the economic cost (the opportunity cost) of other things the council could invest its capital into.

This is also true for ratepaying households – the ultimate equity holders. They could also use their financial capital in other productive ways and are likely not particularly interested in being forced to invest in a water service company.

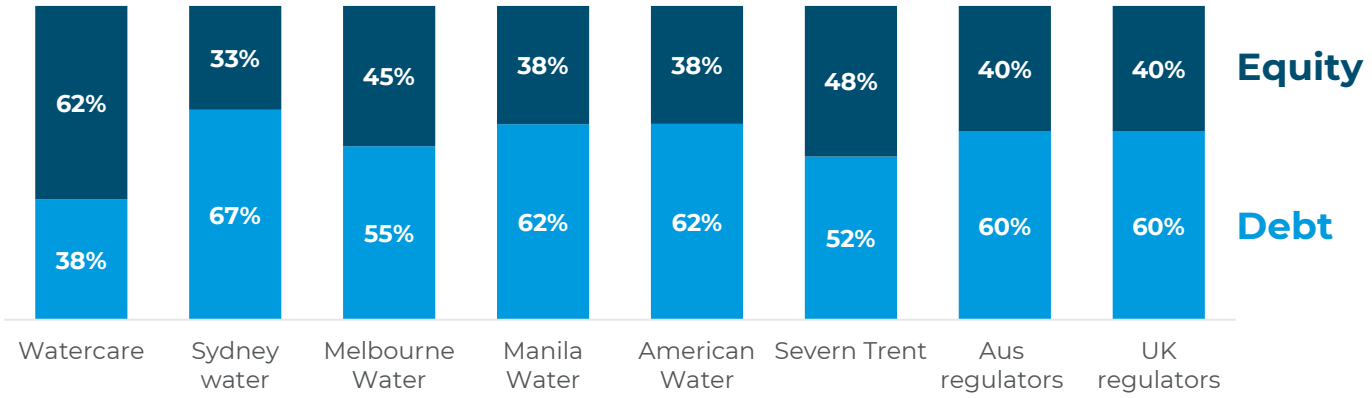


Sophisticated utilities balance debt

Sophisticated utility businesses strategically balance debt and equity to optimise their overall cost of capital. They try to find a 'capital structure' (the proportion of debt and equity) that:

- Reduces the economic cost of capital
- Reduces financial risk

They will then continually tweak their debt and equity to maintain this optimal structure by borrowing more or paying dividends.



Changes to the financing regime

LGFA has confirmed additional support and new financing options for water CCOs established for LWDW:

- Providing leverage up to 500% debt-to-revenue. The maximums for each qualifying water organisation may differ depending on context
- Treating borrowing by water organisations as separate from borrowing by councils
- Requiring a degree of independence on their boards
- Providing financing on terms of up to 13 years (potentially more)
- If councils choose to keep their water services 'in-house', LGFA will also lend to them up to the councils' debt limit
- LGFA might consider other metrics, such as debt to free cash flow or debt to EBITDA, as opposed to solely debt-to-revenue

Effects of changes to the financing regime

For WSPs:

- Water services can borrow more
- They can invest in infrastructure when it is required, without delay
- Investment can be done without exorbitant rates increases
- Long-term financing can stabilise financing costs and reduce risks

For councils:

- In some cases, councils can offload more debt to the WSP than they are currently accounting for
- Councils can use the remaining debt-to-revenue headroom to reduce rates, or borrow more to invest in better public services
- Councils will be able to better manage financing risks for its remaining public services

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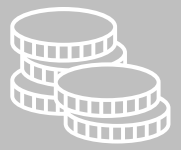

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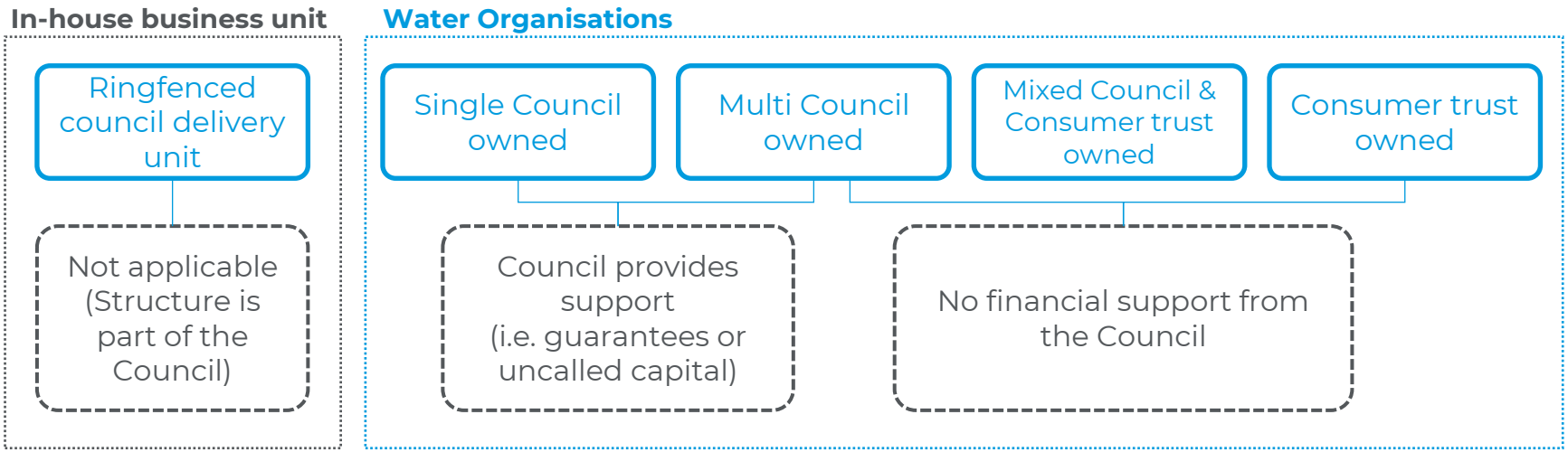
Service delivery options under LWDW

DIA guidance for LWDW sets out the available service delivery options for councils to include in their WSDPs:



More service delivery vehicle options

Within the DIA list, there are several options councils could adopt to improve incentive alignment and strengthen accountability:

In-house business unit	Fully ringfenced and economically regulated, but otherwise organised as per the status quo
Contracted Shared Services	Contractual arrangements between councils with no company/CCO established. Councils share resources according to a negotiated agreement. This is a highly complex and risky arrangement
Management-Only CCO	A CCO is established to provide services under a management contract with the three councils. This could befall a “Wellington Water”-type ending
Lease	A CCO is established to lease the assets from the councils and provide water services. Councils are still responsible for financing new investment
Concession	Assets are transferred to a CCO for a fixed period. Rights to all assets revert to the council(s) at the end of the arrangement
Divestiture to CCO	Assets are transferred to a CCO (sometimes under a licensing arrangement), including full legal ownership of the assets
Divestiture to consumer trust	Assets are transferred to a consumer-owned trust (either wholly or partially), giving full responsibility for operations, maintenance, and investments.

Council control over joint delivery models

For joint service delivery models, concerns about the loss of council control can be mitigated through careful design of the chosen structure:

- Governance appointments (for all options)
- Additional contractual performance obligations on the CCO (for all options)
- Retaining ownership of assets (contracted shared services, management CCO, lease)
- Retaining final decision-making on expenditure and tariff-setting (contracted shared services, management CCO, lease)

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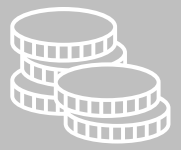

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Councils should focus on future outcomes

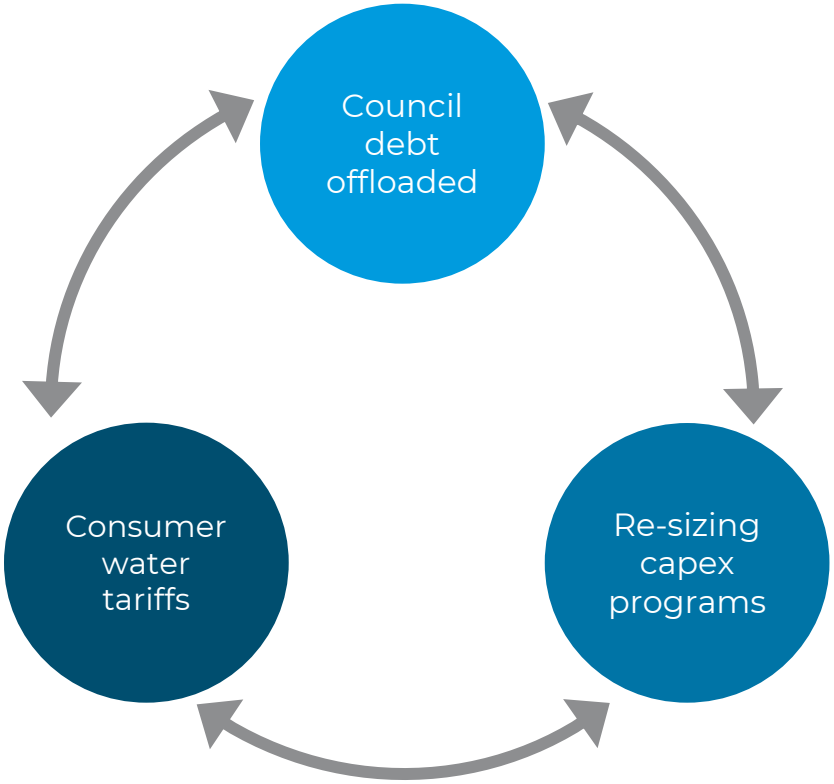
Past costs and decisions are sunk. From an economic and decision-making point of view, we should look at the future and make decisions that lead to the best possible outcome

Considering this, the fundamental question facing councils is:

How can we effectively set up the WSPs with the resources available today to ensure their future success?

Key initial decisions for councils

A corporatised joint entity will require negotiation over three key matters. Changing one of these variables requires a proportionate change in one or both other variables



The key question is:
What is the appropriate allocation of debt between the council and CCO, that results in:

- **efficient financing**
- **allows for required future expenditure, and**
- **ensures sustainable tariffs?**

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Underlying principles of trade-offs

Theoretically, customers are indifferent between paying:

- Additional water tariffs to pay off WSP debt
- Additional council rates to pay off council debt

If councils maximise the debt transferred and then raise more debt to spend recklessly, customers will ultimately suffer.

The ability to offload debt presents a one-time opportunity for councils, but it also comes with the responsibility to use it wisely.

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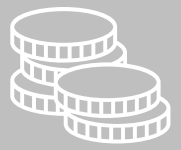

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Upcoming decisions for single-council WSP

When deciding on service delivery options and implementation plan (for WSDP), the councils should analyse options regarding:

Corporate & legal matters:

- Corporate structure
- Governance and oversight (structures and liabilities)
- How to drive corporate efficiency and incentives
- How early do you adopt economically efficient tariff methodologies

Financial matters:

- Capital expenditure scenarios
- Allocation of debt to the WSP
- What tariff levels are acceptable to consumers
- How to use the councils' additional debt headroom

Upcoming decisions for joint-council WSPs

When deciding on service delivery options and implementation plan (for WSDP), the councils should analyse options regarding:

Corporate & legal matters:

- Corporate structure
- Governance and oversight (how councils will control the CCO
- Driving efficiency and incentives
- Early adoption of economically efficient tariff methodologies

Financial matters:

- Forecast capital expenditure program
- Allocation of debt to the WSP
- What tariff levels are acceptable to consumers
- How to use the councils' additional debt headroom

Inter-council equity:

- Uniform or regionalised tariff schedules
- Pricing transition period to deal with historical inequalities in investment
- How capex will be prioritised
- How employment opportunities are shared

Questions

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Appendix: worked example

Fictional example: Wairere District Council

Wairere DC is a fictional regional city with a population of 100,000. It also has a large rural area with several rural water schemes.

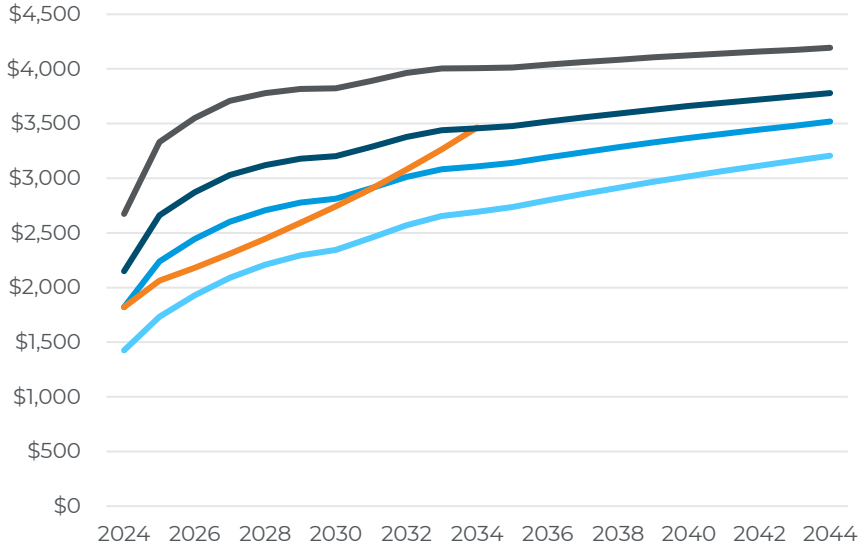
The council has already been ringfencing water services and publishes separate records. Its books include:

- Book value of assets of $600 million
- Debt of $150 million
- 10-year forecast capex requirement of $160 million
- Current average residential targeted rates for water of $1,000/year

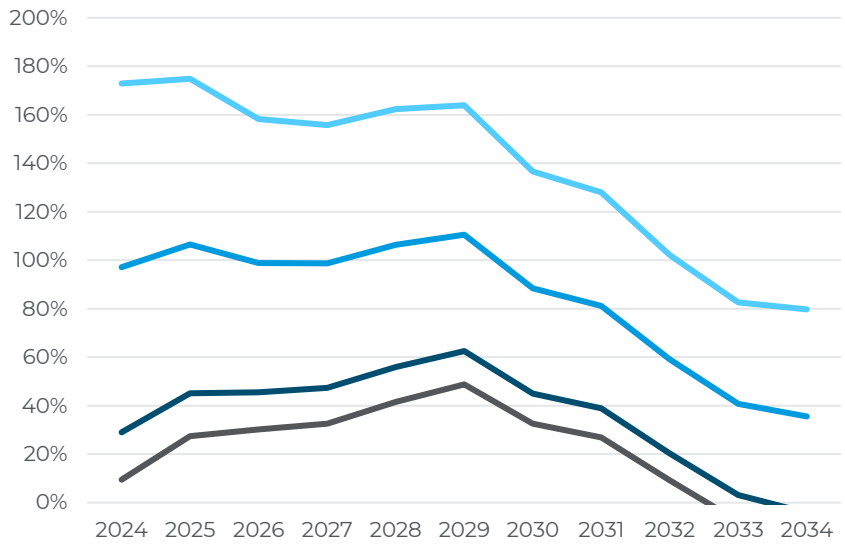
Trade-off between tariffs and debt offloaded

Wairere DC must choose an initial Regulatory Asset Base, which affects both the tariffs, and the remaining debt held by councils. An option with less remaining debt has higher water tariffs for customers.

Household Water Tariffs (real)



Council debt-to-revenue ratio
(water services off balance sheet)



Book Value RAB
LTP back-calculation RAB
Zero RAB
LTP Forecast
Full Initial debt assignment RAB

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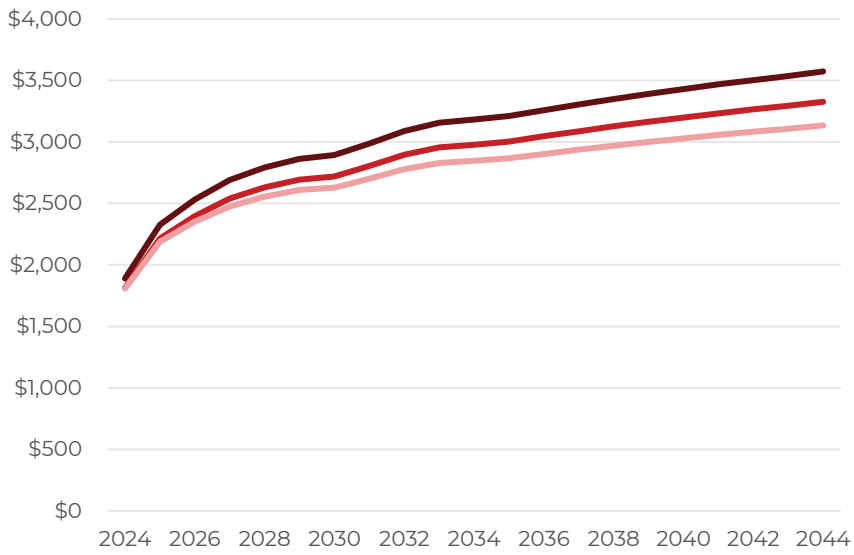
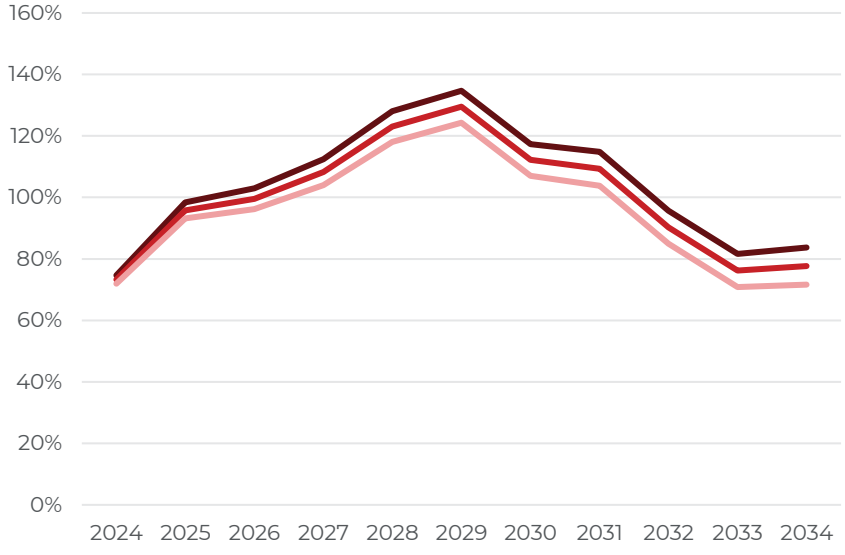
Capex is the third arm of the trade-off

Alternatively, Wairere DC can choose to adjust its capital expenditure plan to have an effect on the household tariffs or the remaining council debt

Reduced Capex Household Water Tariffs (real)



Reduced Capex Total Council Debt-to-Revenue Ratio



LTP back-calculation RAB

LTP back-calculation RAB 10% reduced Capex

LTP back-calculation RAB 20% reduced Capex

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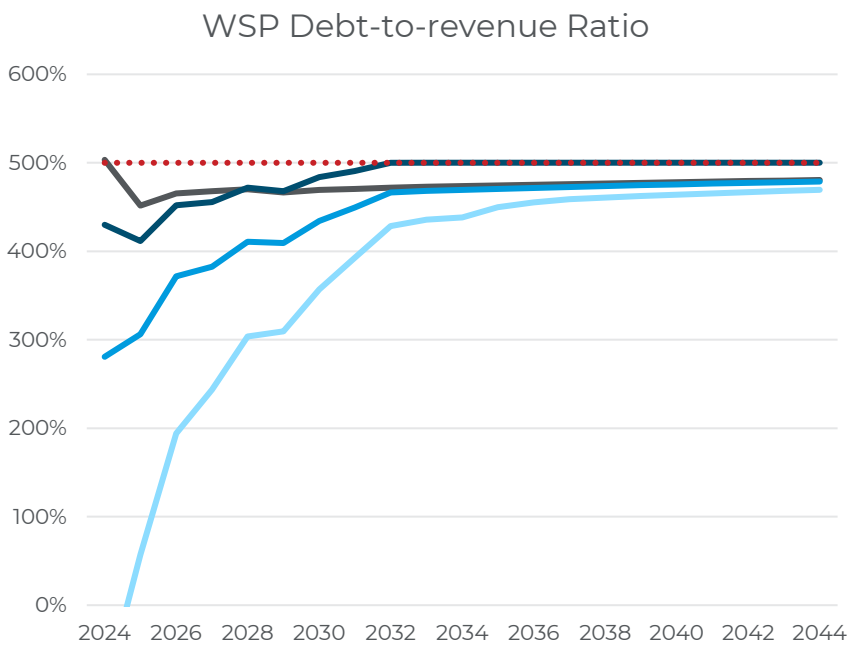
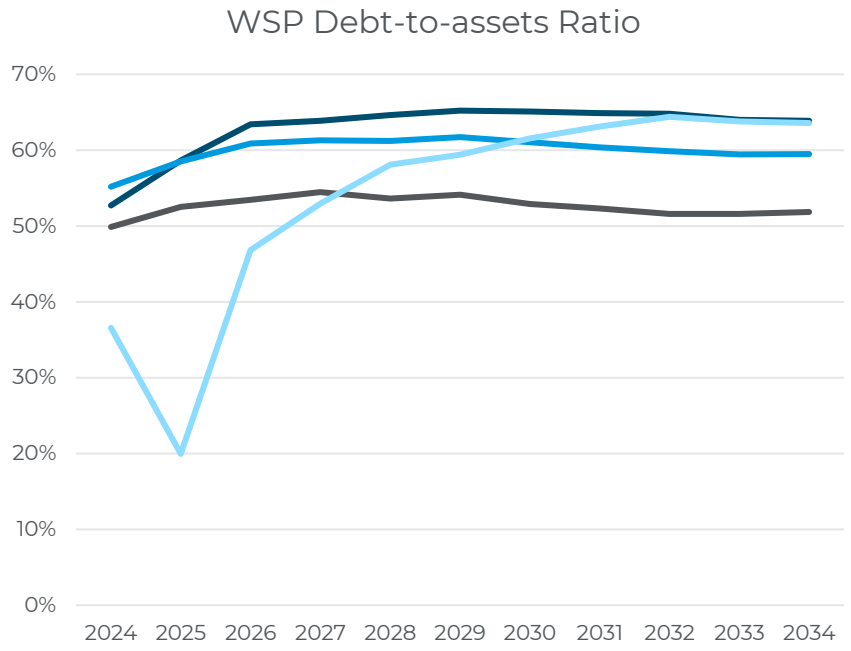
The ringfenced WSP will seek an efficient capital structure

These graphs show that the WSP, under several different scenarios, is always trying to find an efficient capital structure and financing arrangement to reduce economic costs





Book Value RAB
LTP back-calculation 2w RAB
Full Initial debt assignment RAB
Zero RAB

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Wairere DC could also join with its neighbours

Wairere DC can also consider collaborating with neighbouring councils.

Its neighbouring councils have varying water service characteristics:

- Some serve rural populations with higher service costs
- Some have neglected water infrastructure spending in the past, requiring significant upgrades in the near future
- Some benefit from strong growth and development contributions to fund services
- Some have assigned significant council debt to their water service's existing balance sheet

Wairere DC could also join with its neighbours

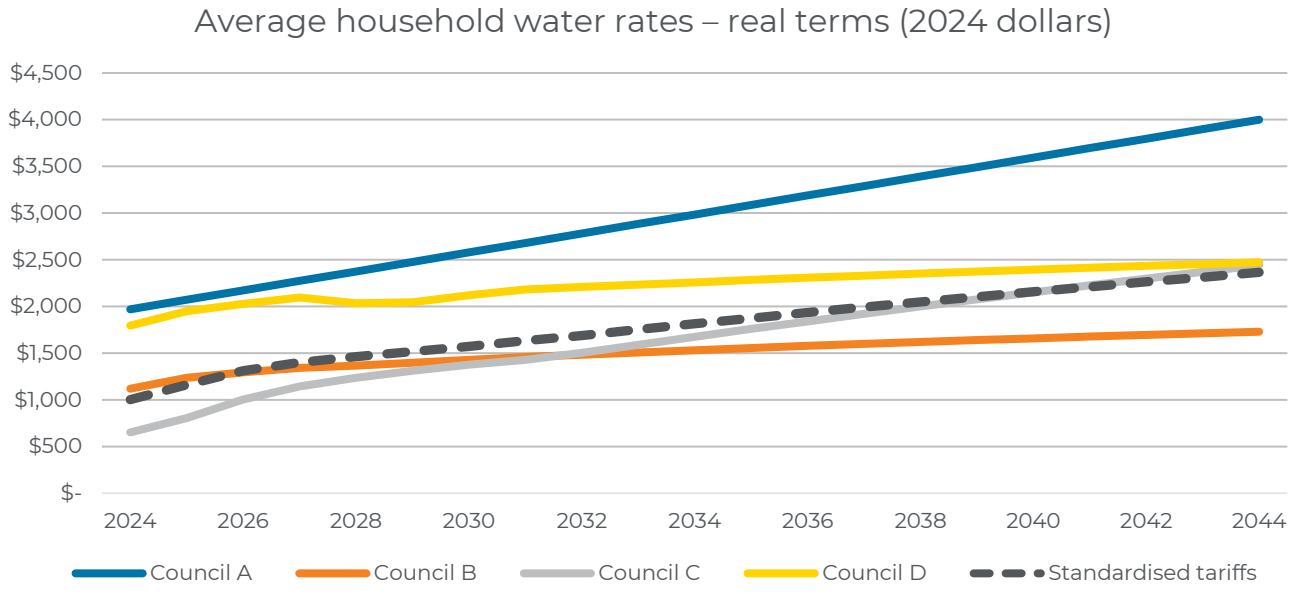
Wairere DC and its neighbours will have to come to an agreement on:

- How much debt should be allocated to the water service
- Whether tariffs are unified or regionalised
- How to control the shared entity managed

Unified vs regionalised pricing

Unified tariffs: customers across all council areas will have the same tariff schedule – customers of the same category and usage pay the same amount

Regionalised tariffs: customers in a specific region pay for tariffs used to deliver services in that region. Overheads are shared equally per customer. This is the model used in the electricity sector.



Councils will need to negotiate on debt offloading

Councils will have to agree on how council debt should be offloaded onto the WSP. There are a few options for this:

Allocation according to the recorded book value of debt for water services in the council accounting reports

Equal allocation for all councils

Allocation is relative to the sizes of the water service businesses. This could be measured according to council population, customers, or other similar metrics

These options will affect councils' debt and may affect whether they exceed their debt-to-revenue limits