ATTACHMENTS

Ordinary Council Meeting Under Separate Cover

Wednesday, 13 November 2024



Table of Contents

7.1	Local Water D	one Well - Wellington Region Water Services Delivery Plan	
	Attachment 1	DIA "WSDP Template"	4
	Attachment 2	DIA "Water Services Delivery Models Guidance for Local Authorities"	32
	Attachment 3	Wellington Region Water Services Delivery Planning "Recommended regional approach to a joint Water Services Delivery Plan and delivery model"	59
	Attachment 4	Castalia "Peer Review of Wellington Region Network Modelling"	. 234
	Attachment 5	Gravelroad Limited "Review of Castalia's Regional Water Economics Model Peer Review Report"	. 265
	Attachment 6	LWDW "Benefits and Opportunities Analysis"	. 270
	Attachment 7	Wai + T Project Report	. 272
	Attachment 8	DIA "Wairarapa and Tararua Water Done Well Wai+T Analysis"	. 419
	Attachment 9	DIA "Wairarapa and Tararua Water Done Well Masterton District Council"	. 452



Water Services Delivery Plan

[Name of Council or Council Grouping]

[Date submitted]



How to populate this Water Services Delivery Plan template

The intent of this Water Services Delivery Plan template (Plan template) is to support councils to prepare Water Services Delivery Plans ('Plan(s)'), as required by the Local Government (Water Services Preliminary Arrangements) Act 2024 (Act). The Act requires councils to prepare Plans that:

- Identify the current state of the council's water services;
- Demonstrate publicly the council's commitment to deliver water services in a way that:
 - Ensures that the council will meet all relevant regulatory quality standards for its water services;
 - Is financially sustainable for the council;
 - Ensures the council will meet all drinking water quality standards; and
 - Supports the council's housing growth and urban development, as specified in the council's Long-Term Plan.

This Plan template includes explanations of the specific information required under the Act, the type of information that could be provided to demonstrate compliance with the content requirements for the Plans under the Act, and the Department of Internal Affairs' ('the Department(s)') general expectation as to the level of detail to be provided. Please note that these explanations do not constitute legal advice and councils should consider obtaining their own independent legal advice before submitting their Plans. The information needed to be able to complete the Plan should be sourced from existing council documents, such as the Long-Term Plan. Councils who require further information and/or support to prepare their Plans should contact the Department at wdsp@dia.govt.nz.

Please delete these explanations once each section has been completed.

A Financial Plan Template [available at <u>www.dia.govt.nz/Water-Services-Policy-Water-</u> <u>Services-Delivery-Plans</u>] has also been provided to assist councils to populate financial data for financial projections, financial sustainability metrics and other financial disclosures. The Department can provide councils with a Financial Projections template populated with publicly available information based on 2024-34 Long-Term Plan information on request. The projected financial statements are special purpose financial statements for the purpose of PBE FRS 42 – Prospective Financial Statements.

Process guidance matters related to the preparation and submission of the Plans is available at <u>www.dia.govt.nz/Water-Services-Policy-Water-Services-Delivery-Plans</u>

Joint Plans: Part A of this Plan template includes additional guidance for information requirements in joint Plans. Councils who are proposing to submit joint Plan should contact the Department.

Page 2 of 28



Table of Contents

Part A: Statement of financial sustainability, delivery model, implementation plan and
assurance
Statement that water services delivery is financially sustainable
Proposed delivery model 4
Implementation plan5
Consultation and engagement5
Assurance and adoption of the Plan6
Part B: Network performance
Investment to meet levels of service, regulatory standards and growth needs7
Part C: Revenue and financing arrangements 13
Revenue and charging arrangements 13
Funding and financing arrangements13
Part D: Financial sustainability assessment
Confirmation of financially sustainable delivery of water services
Financial sustainability assessment - revenue sufficiency 16
Financial sustainability assessment - investment sufficiency
Financial sustainability assessment - financing sufficiency
Part E: Projected financial statements for water services
Water Services Delivery Plan: additional information
Significant capital projects
Risks and assumptions

Page 3 of 28

Part A: Statement of financial sustainability, delivery model, implementation plan and assurance

Statement that water services delivery is financially sustainable

Statement that water services delivery is financially sustainable

Financially sustainable water services provision

The purpose of this section is to summarise how the Plan will ensure that water services will be delivered in a financially sustainable manner, by 30 June 2028 at the latest.

This requires confirmation that the Plan ensures water services delivery will meet the Financially Sustainable delivery assessment in Part D of the Plan template.

It is recommended that this section includes commentary (from Part D) on:

- Transitional arrangements to ensure financially sustainable water services provision by 30 June 2028;
- Revenue requirements to meet costs of water services delivery over the Plan period;
- The proposed levels of investment required over the Plan period; and
- Funding and financing arrangements to deliver the proposed levels of investment.

Proposed delivery model

Proposed model to deliver financially sustainable water services

The proposed model to deliver water services

The purpose of this section is to succinctly describe the proposed delivery model, or arrangements for the future delivery of water services (including organisation structure, ownership and contractual arrangements). In explaining how water services are proposed to be delivered, the Plan must set out:

- The anticipated or proposed model or arrangements for delivering water services (including, whether the council or councils will continue to deliver water services in its district alone, or intends to enter a joint arrangement);
- How water services revenues will be ringfenced as separate and distinct from other council business.
- The following matters may also be included in this section
 - Why the proposed delivery model was selected and the benefits of this model;
 - Proposed revenue collection methods, how charges are set and how revenues will cover the costs of service provision.

Councils will need to describe the anticipated or proposed model or arrangements in sufficient detail to enable an implementation plan to be developed and address the related sections regarding how the proposed model will impact regulatory compliance and financial projections.

Implementation plan

Implementation plan

Implementing the proposed service delivery model

The council must give effect to the proposals or undertakings relating to the future delivery of water services that are identified in the councils' Plan. Plans must include an implementation plan that:

- Sets out the process for delivering the proposed model or arrangements identified in the Plan; and
- If a council is proposing to continue to deliver water services itself, and not as part of a joint arrangement, the actions that the council will take to ensure its delivery of water services will be financially sustainable by 30 June 2028.

The implementation plan must include:

- The name of each council that commits to delivering the proposed model or arrangements;
- A process for delivering the proposed model or arrangements;
- A commitment to give effect to the proposed model or arrangements once the Plan is accepted; and
- The timeframes and milestones for delivering the proposed model or arrangements.

Additional guidance for joint Plans (and arrangements)

Each council that is proposed to be a party to the joint arrangement must be clearly identified in the joint plan. Joint Plans must include:

- A description of whether the joint arrangement will deliver:
 - All water services for all councils within the joint arrangement; or
 - All water services except for some or all services in relation to all the councils' stormwater networks; or
 - All water services for some of the councils, and all water services except for some or all services in relation to stormwater networks for other councils.
- Information on the likely form of the joint arrangement, including whether it is anticipated it will involve water services being delivered by:
 - A joint water services council-controlled organisation (WSCCO);
 - An arrangement described in section 137 of the Local Government Act 2002;
 - Another organisation or arrangement that the councils are considering.
 - A joint Plan may also contain further information about the joint arrangement, including:
 - The ownership structure
 - The governance structure
 - The control and financial rights of each council in the joint arrangement.

Consultation and engagement

Consultation and engagement

Consultation and engagement undertaken

The purpose of this section is to summarise consultation and engagement carried out in the development of the Plan. A council or group of councils must consult the community on its anticipated or proposed model or arrangement for delivering water services in its Plan. A council or groups of councils are not required to consult generally on a draft or final plan, but a council may choose to do so.

Any consultation the council undertakes must be in accordance with the consultation and decision-making requirements in sections 61 to 64 of the Act.

Further information on consultation is included in the Process guidance.



Assurance and adoption of the Plan

Assurance and adoption of the Plan

The Act requires that each Plan that is submitted to the Secretary for Local Government for acceptance must include a certification, made by the Chief Executive of the council(s) to which the Plan relates, that:

- The Plan complies with the Act; and
- The information contained in the Plan is true and accurate.

While the Act does not require Plans to be verified independently, to ensure that the information is true and accurate, Councils may wish to either seek independent advice to verify the accuracy of information provided in the Plan or assess their Plan in-house. While not a mandatory requirement, we recommend considering the matters set out below when certifying the Plan.

When certifying the Plan, the Chief Executive of the council(s) may include commentary on:

- The levels of confidence in the underlying information included in the Plan. This could include comment on the level of confidence in regulatory compliance, asset condition, investment requirements, asset valuations or certainty around financial projections.
- Any material risks or constraints that may impact on the delivery of water services, the ability to implement the Plan or to achieve financially sustainable water services provision by 30 June 2028.
- Any assurance processes undertaken to verify the accuracy of information included in the Plan.

Council resolution to adopt the Plan

Councils must adopt their Plans by resolution. In order to demonstrate compliance with this requirement, it is expected that councils will include the resolution date and a copy of the decision to adopt the Plan. For a joint Plan, this resolution to adopt the Plan must be completed by each council to which the Plan relates.

Certification of the Chief Executive of [Council name]

The Council Chief Executive can complete the following certification statement to demonstrate compliance. For joint Plans, this certification statement should be modified to certify only the information provided by the council in the preparation of the Plan, as opposed to all information included in the Plan.

I certify that this Water Services Delivery Plan:

- complies with the Local Government (Water Services Preliminary Arrangements) Act 2024, and
- the information contained in the Plan is true and accurate.

Signed:

Name:

Designation:

Council: Date:

Additional guidance for joint Plans

For a joint Plan, a resolution to adopt the Plan must be completed by each council to which the Plan relates.

For a joint Plan, the certification statement must be made by the Chief Executive of each council to which the Plan relates, in respect of the information provided by that council.



Part B: Network performance

Investment to meet levels of service, regulatory standards and growth needs

Investment required in water services

Serviced population

The purpose of this section is to succinctly describe:

- Current population of the city or district (or combined city or districts) that the council (or councils) provide water services to;
- Current population within the city or district that does not receive water services; and
- The estimated future population that will require water services over the next 10-30 years.

Populate the following table

Projected serviced population	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Serviced population	[X,XXX]									
Total residential connections	[X,XXX]									
Total non-residential connections	[X,XXX]									

Serviced areas

The purpose of this section is to succinctly describe:

- The areas in the city or district that receive water services (agriculture/rural council owned water schemes that supply domestic drinking water to be included);
- The areas in the city or district that do not receive water services;
- Current levels of services and performance relating to water services currently provided (refer to non-financial DIA performance standards and council levels of service (LOS) performance measures); and
- The water services infrastructure associated with providing for population growth and development capacity.



Populate the following table					
Serviced areas (by reticulated network)	Water supply # schemes	Wastewater #schemes	Stormwater # catchments		
Residential areas (If more than one identify separately)	[name of scheme(s) and number of connections]	[name of scheme(s) and number of connections]	[name of scheme(s) and number of properties served]		
Non-residential areas (If more than one identify separately)	[name of scheme and number of connections]	[name of scheme and number of connections]	[name of scheme and number of properties served]		
Mixed-Use rural drinking water schemes (where these schemes are not part of the council's water services network)	[name of scheme and number of connections]	n/a	n/a		
Areas that do not receive water services (If more than one identify separately)	[number of properties not connected]	[number of properties not connected]	[number of properties not served]		
 Proposed growth areas Planned (as identified in district plan) Infrastructure enabled (as identified and funded in LTP) 	[name of growth area and number of connections]	[name of growth area and number of connections]	[name of growth area and number of properties served]		

Assessment of the current condition and lifespan of the water services network

The purpose of this section is to describe:

- Average age of network assets;
- Condition of network assets providing water services (include assessment of condition of assets, when condition assessment was last carried out, expected lifespan and quantity of backlog of renewals and maintenance); and
- Critical water services assets (if available).

Populate the following table

Parameters	Drinking supply	Wastewater	Stormwater
Average age of Network Assets	[age]	[age]	[age]
Critical Assets	[identified / not identified]	[identified / not identified]	[identified / not identified]
Above ground assets			
Treatment plant/s	[number]	[number]	[number]
Percentage or number of above ground assets with a condition rating	[%]	[%]	[%]
Percentage of above –ground assets in poor or very poor condition	[%]	[%]	[%]
Below ground assets			
Total Km of reticulation	[Km]	[Km]	[Km]
Percentage of network with condition grading	[%]	[%]	[%]
Percentage of network in poor or very poor condition	[%]	[%]	[%]

Page 8 of 28



Asset management approach

In this section, Plans must briefly describe the asset management approach being used or proposed for future delivery model, including capital, maintenance, and operational programmes for delivering water services. This may include:

- Existing and proposed service delivery mechanisms;
- Existing and proposed asset management systems;
- Supporting asset management policy or framework; and
- Asset management maturity assessment (if available).

Statement of regulatory compliance

The purpose of this section is to describe: :

- Any significant resource consents held by the council or councils, the type of consent, and their expiry date;
- Any expired consents that are currently being renewed under section 124 Resource Management Act 1991;
- Any active resource consent applications;
- Whether and to what extent water services comply with current regulatory requirements;
- Whether and to what extent water services will comply with any anticipated future regulatory requirements;
- Whether any water services are not expected to comply with current regulatory requirements or are not expected to comply with any anticipated future regulatory requirements, and if so:
 - A description of the actual or potential non-compliance; and
 - A description of how the proposed delivery model or arrangements provided under the Plan will assist to ensure water services will comply.

It is expected that in this section, Plans will also describe how the Plan ensures that the council (or councils for a joint Plan) will meet all relevant regulatory quality standards for its water services.

Page 9 of 28



arameters	Drinking supply	Wastewater	Stormwater Schomos (catchmonts
Drinking water supply	Schemes	n/a	n/a
Bacterial compliance (E coli)	[ves or po]	170	in a
Protozoa compliance	[yes or no]		
Chemical compliance	[yes or no]		
Boiling water notices in place	[# of notices in place for last 3 years]		
Eluoridation	[ves/no/planned/not applicable]		
Average consumption of drinking water	[l/person/day]		
Water restrictions in place (last 2 years)	[ves or no]		
Water restrictions in place (last 5 years) Eirofighting sufficient	[ves/no]		
Significant consents (note if consent is expired and	Water supply take [number]	Wastewater discharge water/land/air	Stormwater discharge [number]
operating on \$124)	Water discharge [number]	[number]	Network [number]
operating on Siz-	Water discharge [number]	Network [number]	Network [number]
Expire in the next 10 years	[number]	[number]	[number]
	[[]	[
Non-compliance:			
 Significant risk non-compliance 	[number]	[number]	[number]
Moderate risk non-compliance	[number]	[number]	[number]
Low risk non-compliance	[number]	[number]	[number]
·			
 Active resource consent applications 	[number/detail consent]	[number/detail consent]	[number/detail consent]
 Compliance actions (last 24 months): 			
Warning	[number]	[number]	[number]
Abatement notice	[number]	[number]	[number]
Infringement notice	[number]	[number]	[number]
Enforcement order	[number]	[number]	[number]
Convictions	[number]	[number]	[number]

Further guidance on regulatory compliance measures is provided at the end of this section.

Page 10 of 28

Capital expenditure required to deliver water services and ensure that water services comply with regulatory requirements

In this section, it is expected that Plans will highlight significant capital projects included in projected investment requirements. Significant projects are those that will achieve compliance, LOS, and enable growth. They should also include significant renewals and upgrades of the networks.

This section should include projects that may not currently be identified in the Long-Term Plan but are deemed to be a significant project over the following 20 years.

In this section, Plans must provide details on the capital expenditure required (for a period of not less than 10 consecutive financial years starting with the 2024-25 financial year) to deliver water services and ensure that water services comply with regulatory requirements.

In describing the capital expenditure required over 10 years to deliver water services, it is expected that councils will ensure that the level of investment:

- Meets existing and proposed levels of service;
- Enables the operation, maintenance and renewal of network assets;
- Meets regulatory requirements; and
- Provides for growth to the extent it supports the council's housing growth and urban development, as specified in the council's current Long-Term Plan.

Councils may refer to their 30-year Infrastructure Strategy, where proposed investment outside of the 10-year Plan period will respond to or have a material impact on the matters set out in the bullet points above.

Councils are encouraged to comment on:

- How the proposed investment leads to an uplift (or maintains) the current level of service; and
- Benefits to communities from the proposed level of investment in terms of levels of service, compliance with regulatory requirements and providing for growth.

This section requires the population of the following summary table of projected investment requirements.

Projected investment in water services	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Drinking Water										
Capital expenditure - to meet additional demand	[\$X,XXX]									
Capital expenditure - to improve levels of services	[\$X,XXX]									
Capital expenditure - to replace existing assets	[\$X,XXX]									
Total projected investment for drinking water	[\$X,XXX]									
Wastewater										
Capital expenditure - to meet additional demand	[\$X,XXX]									
Capital expenditure - to improve levels of services	[\$X,XXX]									
Capital expenditure - to replace existing assets	[\$X,XXX]									
Total projected investment for wastewater	[\$X,XXX]									
Stormwater										
Capital expenditure - to meet additional demand	[\$X,XXX]									
Capital expenditure - to improve levels of services	[\$X,XXX]									
Capital expenditure - to replace existing assets	[\$X,XXX]									
Total projected investment for stormwater	[\$X,XXX]									
Total projected investment in water services	[\$X,XXX]									

Page 11 of 28



Historical delivery against planned investment

To demonstrate delivery against planning investment, councils are requested to disclose historical actual investment spend on water services infrastructure against planned investment.

Delivery enginet elevered investment		Renewals investment	nt for water services		Total investment in water services					
Denvery against planned investment	FY2024/25	FY21/22 - FY23/24	FY18/19 - FY20/21	Total	FY2024/25	FY21/22 - FY23/24	FY18/19 - FY20/21	Total		
Total planned investment (set in the relevant LTP)	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]		
Total actual investment	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]		
Delivery against planned investment (%)	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]		

Councils are encouraged to confirm if:

- The level of investment that was delivered against what was provided for in the relevant Long-Term Plan;
- Any constraints on delivery that impacted historical actual investment;
- Any steps taken to improve future delivery against the Plan; and
- Peaks in future years and approach to accommodate and deliver on the planned investment.

Additional guidance for Statement of Regulatory Compliance

Regulatory compliance includes meeting drinking water standards, resource consents for water takes and discharges, wastewater discharge consents (land, air, odour amongst others), stormwater discharge consents and network consents (do not include land use consents or temporary structure consents).

Current or future regulatory requirements includes:

- When a system is nearing non-compliance or experiences frequent non-compliance with conditions (for example, nearing level of service, capacity constraints) and consent unlikely to be renewed in current form without investment in water services assets, and systems.
- Existing consents may have been in place for many years, and it is expected when they are renewed that regulatory requirements are likely to be changed significantly to align with newer consent conditions.
- Existing consent conditions are unlikely to meet community or iwi expectations therefore will need to be amended to accommodate.

Confirm if:

- You are delaying wastewater consent replacements and waiting for new regulatory wastewater standards;
- There are any issues with water take/source consents or implementation of water safety plans and associated improvement works (for example, need new water source); and/or
- The investment plan includes fluoridation installation or associated upgrades, (under the Health Act 1956).

Page 12 of 28



Part C: Revenue and financing arrangements

Revenue and charging arrangements

Revenue and charging arrangements

Charging and billing arrangements

It is expected that this section will describe how consumers will be charged for water services, including:

- How water services are currently charged for each supply scheme/catchment;
- How water services are proposed to be charged for each supply scheme/catchment;
- Any changes between current and future charging mechanisms; and
- How the revenue from water services will be separated from the council's other functions and activities.

Water services revenue requirements and sources

It is expected that this section will summarise the:

- *Revenue requirements under the Plan;*
- Sources of revenue household charges (rates and volumetric charges) and other revenue sources (including user charges/fees, Development Contributions, capital/operating subsidies and grants, and other income);
- Where a water services organisation is to be established, whether it is proposed that the water services provider will directly charge consumers or whether charging and billing will be undertaken by council and passed through to the water services provider; and
- Charging and collection methodology for residential and non-residential consumers.

Existing and projected commercial and industrial users' charges

It is expected that this section will summarise the:

- Current charging and collection methodology for water services for residential and non-residential consumers; and
- Projected charges for residential households on average over the 10-year period.

The affordability of projected water services charges for communities

In this section, it is expected that councils will comment on:

- Affordability considerations and constraints, including the community's ability to pay projected water services charges; and
- Average water charges per connection as a percentage of median household income.

Funding and financing arrangements

Funding and financing arrangements

Water services financing requirements and sources

It is expected that this section will describe:

- Projected borrowing requirements over the 10-year period to deliver the level of investment required;
- Minimum cash and working capital requirements for the sustainable delivery of water services;
- Borrowing limits for water services and all council business;
- Whether projected borrowings are within borrowing limits;
- Financial strategy for financing water services investment and operating expenditure;
- Expected tenor of new borrowings and how interest rate and refinance risk will be managed; and
- Debt repayment strategy.

Page 13 of 28



Internal borrowing arrangements

It is expected that this section will summarise:

- Any current internal borrowing arrangements between water services and other council business, including whether finance costs are charged on these arrangements and repayment mechanics;
- Whether it is proposed that internal borrowing arrangements will be used up to 30 June 2028;
- Whether it is proposed that internal borrowing arrangements will be used beyond 30 June 2028; and
- How internal borrowings will be managed to ensure compliance with ringfencing requirements.

Determination of debt attributed to water services

It is expected that this section will describe:

- How debt allocated to water services on 30 June 2024 was determined; and
- The total value of water services borrowings and the net debt to operating revenue calculation on 30 June 2024.

Insurance arrangements

This section should:

- Confirm that the asset owning organisation in the proposed service delivery arrangement will hold the necessary insurance policies;
- Describe whether annual insurance risk assessments are undertaken and if not annually, when the last review of insurance cover was completed;
- Describe whether risk evaluation and assessment identifies probability of loss and cost under scenarios (distinguishing between above and below ground assets); and
- Describe the level of insurance cover for the network, including the basis for valuation of water assets and how insurance cover is calculated for insurable water services assets.

In addition, it is expected that this section will briefly summarise the insurance management policy for water services, including:

- Insurance review policy and asset identification standards;
- Key insurable risks, a description of risk appetite/tolerance and identified mitigations;
- Any link with Council's disaster policy response to mitigate insurance losses; and
- Delegations and reporting on insurance.

Page 14 of 28

Part D: Financial sustainability assessment

Confirmation of financially sustainable delivery of water services

Financially sustainable water services provision

Confirmation of financially sustainable delivery of water services by 30 June 2028

It is expected that this section will demonstrate that the Plan achieves financially sustainable delivery of water services by 30 June 2028, which can be met by confirmation of:

- 'Revenue sufficiency' sufficient revenue to cover the costs (including servicing debt) of water services delivery;
- *'Investment sufficiency' projected investment is sufficient to meet levels of service, regulatory requirements and provide for growth; and*
- *'Financing sufficiency' funding and financing arrangements are sufficient to meet investment requirements.*

Actions required to achieve financially sustainable delivery of water services

The Plan must include an explanation of what the council proposes to do to ensure that the delivery of water services will be financially sustainable by 30 June 2028. This may include:

- Projected price path/revenue requirements and how this ensures that water revenues cover the costs of service (including assumptions for recovery of depreciation);
- The level of investment required over 10-years to meet levels of service, regulatory requirements and provide for growth; and
- How levels of borrowing will be managed within borrowing limits.

Risks and constraints to achieving financially sustainable delivery of water services

The purpose of this section is to summarise any issues, constraints and risks to delivery of financially sustainable water services.

Financial sustainability assessment - revenue sufficiency

Assessment of revenue sufficien	су									
Projected water services revenues cover the	projected cos	ts of deliver	ing water se	rvices						
 It is expected that this section will demonstrat Projected revenues are sufficient to cowater services delivery; Projected revenues are sufficient to fin and Whether projected revenues have been sufficiency' test. 	of Include chart ca	Include the following chart – "Projected water services revenue and expenses". This chart can be generated in the Financial Template.								
Average projected charges for water services	over FY2024	/25 to FY203	3/34							
In this section, councils are requested to popul Councils should provide a brief description of c	ate the finant	cial table belo sed in calcul	ow. All project ating project	cted charges ed median ho	should be inc ousehold cha	clusive of GST rges.				
Projected average charge per connection / rating unit (including GST)	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Drinking water	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
Wastewater	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
Stormwater	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
Average charge per connection / rating unit	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
Increase in average charge	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]
Water services charges as % of median household income	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]	[\$X.X%]

Page 16 of 28



Projected operating surpluses/(deficits) for water services

In this section, councils are requested to populate the financial measure "Operating Surplus Ratio" [Operating surplus excluding capital revenues, divided by operating revenues]. This ratio is an indicator of whether operating revenue is sufficient to cover operating expenses. Where this ratio percentage is negative, this represents the percentage increase required for revenues to cover costs. Councils should specify the unit of measurement in the table (for example, \$k or \$m).

Operating surplus ratio (whether revenues cover costs)	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Operating surplus/(deficit) excluding capital revenues – combined water services	[\$X,XXX]									
Operating revenue – combined water services	[\$X,XXX]									
Operating surplus ratio	[\$X.X%]									

Councils should comment on:

- Whether projected operating revenues generate surpluses or deficits;
- The policy for recovering depreciation charges when setting revenues;
- What any surpluses generated will be applied to; and
- Where there is an operating deficit in any year, comment as to why this is appropriate.

Projected operating cash surpluses for water services

In this section, councils are requested to populate the financial measure "Operating Cash Ratio" [Operating surplus plus depreciation plus interest costs minus capital revenues, divided by operating revenue]. This ratio is an indicator of whether cash surpluses are generated from operations to pay interest, fund investment and repay debt. Councils should specify the unit of measurement in the table (for example, \$ or \$m).

Operating cash ratio (whether revenues cover costs)	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Operating surplus/(deficit) + depreciation + interest costs - capital revenues	[\$X,XXX]									
Operating revenue – combined water services	[\$X,XXX]									
Operating cash ratio	[\$X.X%]									

Councils should comment on:

- Whether projected operating cashflows are generated;
- What cash surpluses generated will be applied to; and
- Whether projected operating cashflows are sufficient to meet renewals investment requirements and to meet scheduled debt repayments.

Page 17 of 28

Financial sustainability assessment - investment sufficiency

Assessment of investment sufficiency

Projected water services investment is sufficient to meet levels of service, regulatory requirements and provide for growth

It is expected that this section will demonstrate that:

- Proposed level of investment is sufficient to meet levels of service, regulatory requirements and provide for growth;
- Proposed level of investment is fully funded by projected revenues and access to financing; and
- Projected levels of investment have been assessed as meeting the 'investment sufficiency' test.

Include the following chart – "Projected water services investment requirements". This chart can be generated in the Financial Template.



Renewals requirements for water services

To demonstrate asset sustainability, councils are requested to populate the below financial measure "Asset Sustainability Ratio" [Capital expenditure on renewals divided by depreciation, minus 1]. This ratio assesses whether projected renewals investment is more or less than projected depreciation and is an indicator as to whether the renewals programme is replacing network assets in line with the rate of asset deterioration.

Where the ratio is positive, this means that there is more projected renewals investment than projected depreciation. Where this ratio is negative, this means that projected renewals investment is less than projected depreciation.

Councils should specify the unit of measurement in the table (for example, k or m).

Asset sustainability ratio	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Capital expenditure on renewals – all water services assets	[\$X,XXX]									
Depreciation – all water services assets	[\$X,XXX]									
Asset sustainability ratio	[\$X.X%]									

Councils should comment on:

- How the proposed renewals investment has been determined and how this is consistent with the long-term infrastructure strategy, asset management plan and/or other strategic documents relating to water services asset management; and
- Where the projected levels of renewals investment is lower than projected depreciation, why this is appropriate.

Page 18 of 28



Total water services investment required over 10 years

To demonstrate asset improvement, councils are requested to populate the below financial measure "Asset Investment Ratio" [Total capital expenditure divided by depreciation, minus 1].

This ratio compares total investment to projected depreciation. Where the ratio is positive, this means that there is more projected investment than projected depreciation. Where this ratio is negative, this means that projected investment is less than projected depreciation.

Councils should specify the unit of measurement in the table (for example, \\$k or \\$m).

Asset investment ratio	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Total capital expenditure – all water services assets	[\$X,XXX]									
Depreciation – all water services assets	[\$X,XXX]									
Asset investment ratio	[\$X.X%]									

Councils should comment on:

- How the proposed levels of investment have been determined; and
- How this is consistent with the long-term infrastructure strategy, asset management plan and/or other strategic documents relating to water services asset management.

Average remaining useful life of network assets

To demonstrate asset consumption, councils are requested to populate the below financial measure "Asset Consumption Ratio" [Book value of infrastructure assets divided by replacement value of infrastructure assets].

This ratio compares the book value of water infrastructure assets to total replacement value of water infrastructure assets. The ratio percentage represents the average remaining useful life of network assets. If this ratio materially reduces over time, then this means that the burden on future consumers to replace network assets is increasing.

Councils should specify the unit of measurement in the table (for example, \$k or \$m).

Asset consumption ratio	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Book value of water infrastructure assets	[\$X,XXX]									
Replacement value of water infrastructure assets	[\$X,XXX]									
Asset consumption ratio	[\$X.X%]									

Councils should comment on:

- The impact that the proposed level of investment has on the average remaining useful life of network assets over the 10-year period; and
- Where there is a material decrease in the asset consumption ratio over time, how investment beyond FY2033/34 will ensure that asset replacement requirements are delivered.



Financial sustainability assessment - financing sufficiency

Assessment of financing sufficiency	
Confirmation that sufficient funding and financing can be secured to deliver water ser	vices
It is expected that this section will confirm: Whether projected total council borrowings are within council borrowing limits, Whether projected water services borrowings are within the council-determined The required levels of borrowings can be sourced; and The Plan meets the 'financing sufficiency' test. Projected council borrowings against borrowing limits	d limit for water services borrowing;
Include the following chart – "Projected council net debt to operating revenue". This chart can be generated in the Financial Template. If councils have produced a joint Plan, each council is required to produce a projected council net debt to operating revenue graph. Advice should be sought from the Department as to whether water services revenues and debt should be included, which will be dependent on the proposed service delivery model.	Include the following chart – "Projected water services net debt to operating revenue". This chart can be generated in the Financial Template. It is recommended that an appropriate borrowing limit is set for water services that reflects the levels of investment proposed, whilst ensuring that council stays within its borrowing covenants.
Projected council net debt to operating revenue 500.0 400.0 50	Projected water services net debt to operating revenue 500% 1600 1600 1000 500% 1000

Page 20 of 28



Projected borrowings for water services

In this section, councils are requested to populate the below financial measure "Net Debt to Operating Revenue" [gross borrowings minus cash and equivalents, divided by operating revenue].

Operating revenue is used as a proxy for the Local Government Funding Agency's (LGFA) definition of revenue, for simplicity. LGFA defines revenue for this purpose as "Cash earnings from rates, grants and subsidies, user charges, interest, dividends, financial and other revenue and excludes non-government capital contributions (e.g. developer contributions and vested assets)".

This ratio compares projected borrowings (minus cash and cash equivalents) to projected operating revenues. Councils should specify the unit of measurement in the table (for example, \$k or \$m).

Net debt to operating revenue	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Net debt attributed to water services (gross debt less cash)	[\$X,XXX]									
Operating revenue – combined water services	[\$X,XXX]									
Net debt to operating revenue %	[\$X.X%]									

Councils should comment on:

- The profile of borrowings required and how this relates to the timing of investment requirements; and
- Whether the projected net debt to operating revenue calculation is within the council-determined limit for water services.

Borrowing headroom/(shortfall) for water services

In this section, councils are requested to populate the below financial measure "Borrowing Headroom/(Shortfall)" [Maximum allowable net debt at borrowing limit (operating revenue multiplied by 'net debt to operating revenue limit for water services') minus projected net debt attributed to water services].

This measure determines whether projected borrowings are within borrowing limits, as well as the ability to borrow for unforeseen events. A positive number equates to the additional amount of borrowings that could be taken on without exceeding borrowing limits. A negative number means borrowings exceed the borrowing limit.

It is recommended that all water services delivery arrangements have a specified borrowing limit for water services – whether delivered in-house or through the establishment of a water services organisation.

Councils should specify the unit of measurement in the table (for example, k or m).

Borrowing headroom/(shortfall) against limit	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Operating revenue	[\$X,XXX]									
Debt to revenue limit for water services (%)	[\$X.X%]									
Maximum allowable net debt at borrowing limit	[\$X,XXX]									
Projected net debt attributed to water services	[\$X,XXX]									
Borrowing headroom/(shortfall) against limit	[\$X,XXX]									

Councils should comment on:

- The debt limit specified by council for water services on a net debt to operating revenue basis;
- The amount of projected borrowing headroom; and
- If, in any year, the ratio shows a borrowing shortfall against limit, how this shortfall will be backed by other council revenues, and how this will be rectified through appropriate revenue setting for water services delivery.

Page 21 of 28



Free funds from operations

In this section, councils are requested to populate the below financial measure "Free Funds from Operations". [Free funds from operations for water services (operating revenue minus operating expenses plus depreciation and other non-cash expenses, less interest revenue), divided by net debt (gross borrowings minus cash and equivalents)].

This ratio measures the percentage of debt balance that is generated in free cash flow each year and is key leverage indicator for financiers. Councils should specify the unit of measurement in the table (for example, \$k or \$m).

Free funds from operations	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Projected net debt attributed to water services	[\$X,XXX]									
Projected free funds from operations – water services	[\$X,XXX]									
Free funds from operations to net debt ratio	[\$X.X%]									

Councils should comment on the level of projected leverage for water services under the free funds from operations calculations and how this is consistent with the financial strategy for water services delivery.

Page 22 of 28



Part E: Projected financial statements for water services

Projected financial statements – for drinking water, wastewater, stormwater and combined water services

Projected funding impact statement - water services	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Sources of operating funding										
General rates	[\$X,XXX]	[\$X,XXX								
Targeted rates	[\$X,XXX]	[\$X,XXX								
Subsidies and grants for operating purposes	[\$X,XXX]	[\$X,XXX								
Local authorities fuel tax, fines, infringement fees and other	[\$X,XXX]	[\$X,XXX								
Fees and charges	[\$X,XXX]	[\$X,XXX								
Total sources of operating funding	[\$X,XXX]	[\$X,XXX								
Applications of operating funding										
Payments to staff and suppliers	[\$X,XXX]	[\$X,XXX								
Finance costs	[\$X,XXX]	[\$X,XXX								
Internal charges and overheads applied	[\$X,XXX]	[\$X,XXX								
Other operating funding applications	[\$X,XXX]	[\$X,XXX								
Total applications of operating funding	[\$X,XXX]	[\$X,XXX								
Surplus/(deficit) of operating funding	[\$X,XXX]	[\$X,XXX								
Source of capital funding										
Subsidies and grants for capital expenditure	[\$X,XXX]	[\$X,XXX								
Development and financial contributions	[\$X,XXX]	[\$X,XXX								
Increase/(decrease) in debt	[\$X,XXX]	[\$X,XX)								
Gross proceeds from sales of assets	[\$X,XXX]	[\$X,XXX								
Other dedicated capital funding	[\$X,XXX]	[\$X,XXX								
Total sources of capital funding	[\$X,XXX]	[\$X,XXX								
Applications of capital funding										
Capital expenditure - to meet additional demand	[\$X,XXX]	[\$X,XXX								
Capital expenditure - to improve levels of services	[\$X,XXX]	[\$X,XXX								
Capital expenditure - to replace existing assets	[\$X,XXX]	[\$X,XX)								
ncrease/(decrease) in reserves	[\$X,XXX]	[\$X,XX)								
ncrease/(decrease) in investments	[\$X,XXX]	[\$X,XX)								
Total applications of capital funding	[\$X,XXX]	[\$X,XXX								
urplus/(deficit) of capital funding	[\$X,XXX]	[\$X,XX)								
Funding balance	[\$X,XXX]	[\$X,XX]								

Page 23 of 28



Projected statement of comprehensive revenue and expense

Complete the following table for each of drinking water, wastewater, stormwater, and combined water services. Add or delete rows as appropriate.

Projected statement of profit and loss - water services	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Revenue										
Operating revenue	[\$X,XXX]									
Other revenue	[\$X,XXX]									
Total revenue	[\$X,XXX]									
Expenses										
Operating expenses	[\$X,XXX]									
Finance costs	[\$X,XXX]									
Overheads and support costs	[\$X,XXX]									
Depreciation & amortisation	[\$X,XXX]									
Total expenses	[\$X,XXX]									
Net surplus/(deficit)	[\$X,XXX]									
Revaluation of infrastructure assets	[\$X,XXX]									
Total comprehensive income	[\$X,XXX]									
Cash surplus/(deficit) from operations (ex non-cash items)	[\$X,XXX]									

Projected statement of cashflows

Complete the following table for each of drinking water, wastewater, stormwater, and combined water services. Add or delete rows as appropriate.

Projected statement of cashflows - water services	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Cashflows from operating activities										
Cash surplus/(deficit) from operations	[\$X,XXX]									
[Other items]	[\$X,XXX]									
Net cashflows from operating activities	[\$X,XXX]									
Cashflows from investing activities										
Capital expenditure – infrastructure assets	[\$X,XXX]									
[Other items]	[\$X,XXX]									
Net cashflows from investing activities	[\$X,XXX]									
Cashflows from financing activities										
New borrowings	[\$X,XXX]									
Repayment of borrowings	[\$X,XXX]									
Net cashflows from financing activities	[\$X,XXX]									
Net increase/(decrease) in cash and cash equivalents	[\$X,XXX]									
Cash and cash equivalents at beginning of year	[\$X,XXX]									
Cash and cash equivalents at end of year	[\$X,XXX]									

Page 24 of 28



Projected statement of financial position															
Complete the following table for each of drin	omplete the following table for each of drinking water, wastewater, stormwater, and combined water services. Add or delete rows as appropriate.														
Projected statement of financial position	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34					
Assets															
Cash and cash equivalents	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Other current assets	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Infrastructure assets	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Other non-current assets	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Total assets	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Liabilities															
Borrowings – current portion	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Other current liabilities	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Borrowings – non-current portion	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Other non-current liabilities	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Total liabilities	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Net assets	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$x,xxx]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Equity															
Revaluation reserves	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Other reserves	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					
Total equity	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]					

Page 25 of 28

Water Services Delivery Plan: additional information

Additional disclosures to support Plan

Councils are requested to provide additional disclosures to accompany Plans:

- Projected expenditure on significant capital projects; and
- Disclosure of risks and material assumptions for water services delivery.

The information disclosure requirements have been set out in template form in this addendum section. Councils may wish to use this suggested template, or alternatively can provide this supporting information in another form.



Page 26 of 28



Significant capital projects

This section is to provide a schedule of all material capital projects included in the investment projections in the Plan. Councils are encouraged to set and describe an appropriate materiality threshold for populating these schedules, for example as currently provided in your Long-Term Plans. Councils may wish to include capital projects details that cover an additional 20 years (referring to Infrastructure Strategy).

S	ignificant capital projects										
s	ignificant capital projects – drinking water										
	Significant capital projects – drinking water	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	Projects to meet additional demand										
	[xxx]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	[xxx]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	Total investment to meet additional demand	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	Projects to improve levels of services										
	[xxx]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	[xxx]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	Total investment to meet improve levels of services	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	Projects to replace existing assets										
	[xxx]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	[xxx]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	Total investment to replace existing assets	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
	Total investment in drinking water assets	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]	[\$X,XXX]
S	ignificant capital projects – wastewater										
s	ignificant capital projects – wastewater										
S	ignificant capital projects – wastewater Significant capital projects – wastewater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
s	ignificant capital projects – wastewater Significant capital projects – wastewater Projects to meet additional demand	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
S	ignificant capital projects – wastewater Significant capital projects – wastewater Projects to meet additional demand [xxx]	FY2024/25 [\$X,XXX]	FY2025/26 [\$X,XXX]	FY2026/27 [\$X,XXX]	FY2027/28 [\$X,XXX]	FY2028/29 [\$X,XXX]	FY2029/30 [\$X,XXX]	FY2030/31 [\$X,XXX]	FY2031/32 [\$X,XXX]	FY2032/33 [\$X,XXX]	FY2033/34 [\$X,XXX]
s	ignificant capital projects – wastewater Significant capital projects – wastewater Projects to meet additional demand [xxx] [xxx]	FY2024/25 [\$X,XXX] [\$X,XXX]	FY2025/26 [\$X,XXX] [\$X,XXX]	FY2026/27 [\$X,XXX] [\$X,XXX]	FY2027/28 [\$X,XXX] [\$X,XXX]	FY2028/29 [\$X,XXX] [\$X,XXX]	FY2029/30 [\$X,XXX] [\$X,XXX]	FY2030/31 [\$X,XXX] [\$X,XXX]	FY2031/32 [\$X,XXX] [\$X,XXX]	FY2032/33 [\$X,XXX] [\$X,XXX]	FY2033/34 [\$X,XXX] [\$X,XXX]
S	ignificant capital projects – wastewater Significant capital projects – wastewater Projects to meet additional demand [xxx] [xxx] Total investment to meet additional demand	FY2024/25 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2025/26 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2026/27 [\$x,xxx] [\$x,xxx] [\$x,xxx]	FY2027/28 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2028/29 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2029/30 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2030/31 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2031/32 [\$x,xxx] [\$x,xxx] [\$x,xxx]	FY2032/33 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2033/34 [\$X,XXX] [\$X,XXX] [\$X,XXX]
s	ignificant capital projects – wastewater Significant capital projects – wastewater Projects to meet additional demand [xxx] [xxx] Total investment to meet additional demand Projects to improve levels of services	FY2024/25 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2025/26 [\$x,xxx] [\$x,xxx] [\$x,xxx]	FY2026/27 [\$x,xxx] [\$x,xxx] [\$x,xxx]	FY2027/28 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2028/29 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2029/30 [\$x,xxx] [\$x,xxx] [\$x,xxx]	FY2030/31 [\$x,xxx] [\$x,xxx] [\$x,xxx]	FY2031/32 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2032/33 [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2033/34 [\$X,XXX] [\$X,XXX] [\$X,XXX]
S	ignificant capital projects – wastewater Significant capital projects – wastewater Projects to meet additional demand [xxx] [xxx] Total investment to meet additional demand Projects to improve levels of services [xxx]	FY2024/25 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2025/26 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2026/27 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2027/28 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2028/29 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2029/30 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2030/31 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2031/32 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2032/33 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]	FY2033/34 [\$X,XXX] [\$X,XXX] [\$X,XXX] [\$X,XXX]
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Page 27 of 28



Significant capital projects – stormwater										
Significant capital projects – stormwater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Projects to meet additional demand										
[xxx]	[\$X,XXX]									
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Total investment to meet additional demand	[\$X,XXX]									
Projects to improve levels of services										
[XXX]	[\$X,XXX]									
[XXX]	[\$X,XXX]									
Total investment to meet improve levels of services	[\$X,XXX]									
Projects to replace existing assets										
[XXX]	[\$X,XXX]									
[XXX]	[\$X,XXX]									
Total investment to replace existing assets	[\$X,XXX]									
Total investment in stormwater assets	[\$X,XXX]									

Risks and assumptions

Disclosure of risks and material assumptions for water services delivery

Councils may wish to disclose risks and material assumptions for water services delivery that have been included in the Plan. The following optional table has been included as a way such risks and assumptions could be summarised.

Parameters	Drinking supply	Wastewater	Stormwater
Key Risks			
Future water service delivery			
Network performance			
Regulatory compliance			
Delivery of Capital Programme			
Organisational capacity			
Long term issues e.g. providing for growth,			
climate change			
Significant assumptions			
Future water service delivery			
Network performance			
Regulatory compliance			
Delivery of Capital Programme			
Organisational capacity			
• Long term issues e.g. providing for growth,			
climate change			

Page 28 of 28



Water services delivery models: Guidance for local authorities

LOCAL WATER DONE WELL

August 2024

Te Kāwanatanga o Aotearoa New Zealand Government





Introduction

Background

A key feature of Local Water Done Well is providing councils with the flexibility to determine the optimal structure and delivery method for their water services. To support this, the Government is progressing legislation to expand the range of local government water service providers by enabling the establishment of new, financially separate water organisations.

These new water organisations are intended to enable enhanced access to long-term borrowing for water infrastructure – supporting infrastructure development, while managing costs for consumers.

Councils will continue to be able to deliver water services directly (such as through inhouse business units), however they will also be able to establish new water organisations that are more financially and operationally independent of councils.

These models also make it easier for councils who wish to enter joint arrangements to achieve cost savings, improve efficiency and affordability.

Councils will be able to design their own alternative delivery arrangements, as long as these arrangements meet the minimum requirements set out in legislation.

Councils will also have choices about which water services are provided through different service delivery arrangements. For example, they may wish to provide drinking water and wastewater services through a water organisation but retain stormwater services in-house.

This guidance document

This guidance document focuses on the service delivery models and arrangements that will be available to local authorities to deliver water services. It provides further detail on proposals to expand the range of service delivery models available to councils, including by providing for new, financially separate water organisations that councils (and consumer trusts) can own.

In this guidance, the term **'water services provider**' means all forms of local government provider, and including councils that continue with direct (in-house) delivery as well as new water organisations. The term **'water organisation**' refers only to separate organisations that councils may establish to provide water services and does not include councils with direct (in-house) delivery.

This guidance document has five sections:

- Section 1: Minimum requirements of all water services providers and requirements for specific delivery models
- Section 2: Service delivery models available to councils
- Section 3: Governance and accountability arrangements
- Section 4: Financing and credit rating implications
- Section 5: Other powers and authorities available to water organisations.

This guidance document aims to help inform local authorities on service delivery models. It should be read alongside other Local Water Done Well information. The guidance is informed by policy decisions that were announced by the Minister of Local Government in August 2024, and therefore are still subject to change through the Parliamentary process when the Local Government Water Services Bill is introduced to Parliament in December 2024.

More detailed information can also be found in the associated Cabinet papers that have been proactively released on the Department of Internal Affairs' website.

For further information about Local Water Done Well, visit www.dia.govt.nz/Water-Services-Policy-and-Legislation

Questions? Contact <u>waterservices@dia.govt.nz</u>





01 Minimum requirements



Minimum requirements for all service delivery models

The legislation will look to establish a framework for water services delivery that includes:

- a set of minimum requirements that apply to water service providers
- additional legislative requirements that apply to water organisations, focusing on the ownership, governance and structural arrangements for these organisations, and
- further provisions that would apply only to consumer trust-owned (and mixed council/trust owned) water organisations.

Regardless of the model chosen, all water service providers must meet minimum requirements set out in the legislation.

These minimum requirements are designed to promote efficiency, improve the governance and management of financially sustainable water services, and ensure accountability within the sector. The requirements will likely include that all water services providers:

-0-00-0000-00-0-0-00**Will be subject to economic, environmental and water quality regulation** – further information on economic, environmental and water quality regulation is available in the related factsheets: Economic regulation of water services (refer to the economic regulation factsheet for more information), Drinking water quality regulation, and Standards to help reduce water infrastructure costs.



Will be subject to a new planning and accountability framework for water services, including the need to produce stand-alone financial statements for water supply, wastewater, and stormwater – further information outlined in the factsheet: Planning and accountability for local government water services.



Must be financially sustainable – legislation will include an enduring objective for water service providers to be financially sustainable, including a requirement for the ringfencing of water services, an expectation of revenue sufficiency, and accommodating for maintenance, renewals and growth.



Must act consistently with statutory objectives – legislation will set out a list of statutory objectives that will apply to all water service providers. There will also be several additional statutory objectives that apply to water organisations.



Will be subject to restrictions against privatisation – legislation will include prohibitions on losing control, selling or disposing of significant infrastructure. Further, water services assets cannot be used as security.



IE KAUNINERA Å-RONE O WHAKAORIOR



Additional requirements for water organisations

In addition to the minimum requirements that apply to all water services providers, the legislation will also look to include additional requirements that apply to water organisations – affecting their ownership, governance, and structural arrangements.

These requirements will apply to all water organisations, including any existing councilcontrolled organisations and councilcontrolled trading organisations that deliver water services.

These features are not relevant where councils continue with direct service delivery.

The following additional requirements apply to water organisations:





There will be a range of protections against privatisation.



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Requirements for trust-owned water organisations

Water organisations that involve consumer trusts as owners will require additional provisions to ensure that ownership interests cannot be transferred.

This option requires significant controls on the consumer trust as it would have the effective control of water services and assets.

Legislation will set out bespoke requirements that apply to consumer trustowned (and mixed council/trust-owned) water organisations, to ensure alignment with requirements that apply to councils through other legislation. For water organisations that involve consumer trusts:



Consumer trusts must **represent consumers** and their interests.



Consumer trusts will be responsible for **appointing and removing Boards and overseeing their performance.**



Trust deeds must include restrictions on transfer of shares.



Trustees must be **elected by consumers**. Trustees are responsible for appointing, monitoring, and removing Board members (subject to competency and independence requirements), as well as approving or issuing a statement of expectations (depending on mixed or full ownership).



Consumer trusts will have to **comply with all requirements in legislation** or general law relating to trusts, such as having a trust deed.



Consumer trusts may be a **minority or majority shareholder** of a water organisation with territorial authorities, or it may own 100% of the shares.



Trusts will be **restricted from modifying the objects in its trust deed** or selling its shareholding, except to another territorial authority or consumer trust shareholder of another water organisation.





Under Local Water Done Well, the Government has committed that water services will remain in public ownership.

DISTRICT COUNCIL TE KAUNINERA Å-ROKE & WAAKAORION

Councils and water organisations will not be able to privatise water services.

Legislation will likely include the following statutory protections:

- Only local authorities and/or consumer trusts will be permitted to own shares in a water organisation.
- Provisions that prevent:
 - o water infrastructure assets from being used as security for any purpose
 - divestment of ownership or other interest in a water service except to another local government organisation or water organisation, and
 - loss of control of, sale, or other form of disposal of the significant infrastructure necessary for providing water services in its region or district, unless, in doing so, the local authority or water organisation retains its capacity to meet its obligations
- Shares in water organisations cannot give any right, title or interest in the assets, security, debts, or liabilities of the entity, and would not be able to be sold or transferred.
- Water organisations that involve consumer trusts will require additional provisions to ensure ownership interests cannot be transferred.



Exemptions from certain requirements

Exemptions can be considered on a caseby-case basis

The Government has agreed to enable exemptions from certain requirements. This will provide councils with the flexibility to identify and establish the delivery arrangements that work best for them. The exemptions framework acknowledges that there may be certain circumstances where there may be justification in waiving certain requirements.

Legislation will include a process where councils can apply for exemptions to the following requirements, on a case-by-case basis:

- water organisations must be companies
- activities of water organisations will be limited to the provision of water services, and directly-related activities, and
- only councils or consumer trusts can be shareholders of a water organisation, while noting that the legislation will look to ensure that no form of privatisation is permitted.

Councils who wish to apply for exemptions from the above requirements will be required to submit applications to the Secretary for Local Government, who will assess the application and provide advice to the Minister of Local Government. Exemption approvals would be granted through an Order in Council, on the recommendation of the Minister of Local Government.

Applications for exemptions must meet certain conditions

Exemptions will only be granted where the council's proposal for water services:

- meets the legislative objectives of Local Water Done Well
- maintains the core requirements that are non-negotiable bottom lines for all water organisations, including that the proposal does not involve any form of privatisation
- will provide water services that are financially sustainable, and
- satisfy the Minister of Local Government that the financially sustainability of water services would be put at greater risk if the exemption was not granted.





02 Service delivery models



Councils can choose from a range of service delivery models

The choices available to councils include:

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- whether to deliver water services in-house or establish a water organisation
- whether to deliver services on a stand-alone basis or establish a joint arrangement with other councils
- how to structure ownership and governance arrangements for any water organisation, and
- how to set up water organisations to facilitate access to long-term borrowing for water infrastructure

Councils that already deliver water services via a council-controlled organisation or council-controlled trading organisation will be able to continue to use these arrangements. However, the council-controlled organisation or council-controlled trading organisation will be subject to all of the new statutory requirements that will apply to water organisations and changes are likely to be required to meet these requirements. Councils will be able to design their own alternative delivery arrangements, as long as these arrangements meet the requirements for water service providers.

This guidance provides further detail on the following illustrative examples outlined below. Other delivery models are permissible provided they meet certain minimum requirements or if a council obtains an exemption.



Illustrative examples of service delivery models



Overview of service delivery models

1	Internal business unit or division	 Status quo for many councils Minimum requirements for water service providers will apply New financial sustainability, ringfencing rules, and economic regulation will apply
2	Single council-owned water organisation	 New company established, 100% owned by the council Financial sustainability rules will apply, but retains a financial link to the council Councils with existing water council-controlled organisations will be required to meet minimum requirements
3	Multi-council owned water organisation	 New company established with multi-council ownership Appointment of a Board through shareholder council (or similar body) is advisable but not a statutory requirement Option to access Local Government Funding Agency finance with the provision of parent support or to create a more financially independent organisation
4	Mixed council/consumer trust owned	 Consumer trust established to part-own a water organisation One or more councils own the remainder of the shares Structure enables financially independent organisation to be established while retaining some council ownership
5	Consumer Trust owned	 Council transfers assets to consumer trust owned organisation Consumers elect trustees to represent their interests in the organisation Most financially independent of the available models



1. Internal business unit or division

Under this option, water services would be delivered directly by the council 'inhouse' through an internal business unit or division, with planning and budgeting integrated into council planning and budgeting processes. This option will be subject to new ring-fencing and financial sustainability requirements, and economic regulation.

This option represents a continuation of the existing inhouse service delivery model used by many councils.

Revenue continues to be generated through a combination of general and targeted rates and financial/development contributions.

Water service delivery is fully integrated into council strategy, planning, and service delivery.

	Key features
Ownership	 100% council owned as a business unit or division within the organisation No new organisation is established
Governance	 Internal business unit or division responsible to the elected council members, with other usual council governance oversight
Strategy	Councils will need to prepare a Water Services Strategy
Accountability	 Water division reports to council per established internal processes Water service delivery will be accountable to the public through usual local democracy practices Water-focused annual report and stand-alone financial statements on water will be completed to enhance current requirements
Borrowing	 Borrowing undertaken by council with water activity groups meeting their share of financing costs (on internal and any external borrowing)







2. Single council-owned water organisation

New company established to deliver water services, with ownership by a single council. Council can transfer or retain ownership of assets, subject to transfer of asset use rights.

The council has flexibility to design governance and appointment arrangements, including to consider whether and how they involve mana whenua, consumers or community representatives (for example via an appointments and accountability body). The council can also choose to appoint board members directly without roles for other groups.

The council would provide financing to the water organisation or provide financial support to enable it to borrow from Local Government Funding Agency

Key features	
Ownership	 Limited liability company, 100% owned by the council Ownership rights spelled out in a constitution, subject to compliance with legislation
Governance	 Appointments made directly or via an Appointments and Accountability Committee (or similar body) Board comprised of independent and professional directors
Strategy	 Shareholding council issues Statement of Expectations Water organisation prepares Water Services Strategy and consults the council
Accountability	 Water organisation reports regularly to shareholding council on performance (for example quarterly) Water organisation prepares annual report containing audited financial statements, including reporting on actual performance, and other matters outlined in the water services strategy. Water organisation required to act consistently with statutory objectives
Borrowing	 Borrowing via council or from Local Government Funding Agency directly supported by council guarantee or uncalled capital





3. Multi-council-owned water organisation

Under this option, two or more councils would establish a jointly-owned water organisation.

Councils will have flexibility to establish shareholder rights and interests through a company constitution and/or shareholder agreement, subject to compliance with the legislation.

Financing options and credit rating impacts will be dependent on whether shareholding councils choose to provide financial support or not.

	Key features	Illustrative example:
Ownership	 Limited liability company owned by two or more councils Ownership arrangements and rights set out in a constitution and/or shareholder agreement, subject to compliance with the legislation 	Council A Council B Cou
Governance	 Councils agree how to appoint and remove directors, for example through a shareholder council or similar Board comprised of independent and professional directors 	Multiple councils jointly-own the water organisation
Strategy	 Shareholding councils agree the process for issuing a combined Statement of Expectations Water organisation prepares Water Services Strategy and consults shareholding councils 	Councils appoint representatives to shareholder council (or similar body) Shareholder Council
Accountability	 Water organisation reports regularly to shareholding councils on performance (for example quarterly) Water organisation prepares annual report containing audited financial statements, including reporting on actual performance and other matters outlined in the Water Services Strategy. Water organisation required to act consistently with statutory objectives. 	accordance with share allocation plan agreed between councils Appoints and removes water organisation Board members Issues Statement Expectations
Borrowing	 Borrowing arrangements and credit rating implications dependent on whether shareholding councils provide financial support 	Water organisation board Responsible for operational and financial decisions with Statement of Expectations and statutory of



4. Mixed council/consumer trust owned water organisation

Under this option, a consumer trust would be established to part-own a water organisation, with one or more councils owning the remainder of the shares.

Councils will have flexibility to establish shareholder rights and interests through a company constitution and/or shareholder agreement upon establishment, subject to compliance with the legislation.

Water consumers elect trustees to the Consumer Trust. That consumer trust is then represented on the shareholder council (along with council representatives) and/or appoints board members directly. Certain restrictions apply to Consumer Trust to protect against privatisation.

	Key features	Illustrative example:	
Ownership	 Limited liability company owned by a consumer trust, with one or more councils owning the remainder of the shares Ownership arrangements and rights set out in constitution and/or shareholder agreement, subject to compliance with 	Council One or more councils own part of the shares	Water consumers Households and businesses with a water connection
Governance	 Councils and consumer trust appoint a shareholder council to appoint directors Water organisation governed by independent, professional board of directors 	Appoints representatives to shareholder council	Elect trustees (similar to local body elections) Consumer Trust Consumer trust owns part of the
Strategy	 Shareholders agree the process for issuing a combined Statement of Expectations Water organisation prepare Water Services Strategy and consults shareholders 		Appoints shareholder council representatives
Accountability	 Water organisation reports regularly to shareholders on performance (for example quarterly) Water organisation prepares annual report containing audited financial statements, including reporting on actual performance and other matters outlined in the water services strategy. Water organisation required to act consistently with statutory objectives 	Shareholder council(s) Responsible for setting statement of expectations, appointing board directors, and monitoring performance Water company Board	
Borrowing	 Borrowing would be independent of local authorities (for example banks) and subject to water organisation achieving sufficient credit-quality and track record 	Responsible for operation with Statement of Expe	al and financial decisions consistent ctations and statutory objectives



5. Consumer trust owned water organisation

Under this option, one or more councils would establish a wholly consumer trust-owned water organisation, and transfer water assets and responsibility for water services delivery to it.

The council would have no ongoing involvement, as the company board is wholly appointed through the Consumer Trust. Water consumers elect trustees to the Consumer Trust, similar to local body elections.

	Key features	Illustrative example:
Ownership	 Limited liability company solely owned by a newly established consumer trust Trust deed is subject to certain minimum requirements to protect against privatisation 	Council Water consumers Council transfers responsibility for water services delivery to entity owned Households and businesses with a water connection
Governance	 Trustees appoints company directors Water organisation governed by independent, professional board of directors 	Elect trustees (similar to local body elections)
Strategy	 Trustees issue Statement of Expectations Water organisation prepares Water Services Strategy 	Council enters into transfer agreement, which provides for Consumer Trust established to own shares of
Accountability	 Water organisation reports regularly to trustees and consumers on performance (for example quarterly) Water organisation prepares annual report 	transfer of assets, liabilities, employees, and other undertakings the water organisation Responsible for appointing board and monitoring performance
	 containing audited financial statements Water organisation required to act consistently with statutory objectives 	Appoints Board members Owns 100% of the charge
Borrowing	 Borrowing would be independent of local authorities (for example banks) and subject to water organisation achieving sufficient credit- quality and track record 	Water company Board Responsible for operational and financial decisions consistent with statement of expectations and statutory objectives



Summary of features of service delivery models

	1. Internal business unit or division	2. Council-owned water organisation	3. Multi-council-owned water organisation	4. Mixed ownership/ consumer trust owned water organisation	5. Consumer Trust owned water organisation
Ownership	Wholly council-owned as a business unit or division	Wholly council-owned as a separate water services organisation	Ownership shared across two or more councils	Consumer trust part-owns water organisation, with one or more councils owning the remainder of the shares	Wholly-owned by consumer trust as a separate water organisation
Governance	Internal business unit or division, responsible to Council through established mechanisms under Local Government Act 2002	Councils (and potentially other groups) appoint Appointments and Accountability committee (or can appoint board directly). Council or committee oversee board performance	Councils appoint members to a Shareholder Council, which appoints Board and oversees performance	Councils and trustees appoint a shareholder council to appoint directors	Trustees appoint directors and oversees performance
Strategy	Councils must prepare Water Services Strategy	Parent council issues Statement of Expectations. Water organisation prepares Water Services Strategy.	Shareholders agree process for issuing combined Statement of Expectations. Water organisation prepares Water Services Strategy	Shareholders agree process for issuing combined Statement of Expectations. Water organisation prepares Water Services Strategy	Trustees issue Statement of Expectations Water organisation prepares Water Services Strategy
Accountability	Water-focused annual reports and financial statements	Reports to owners quarterly, prepares audited annual report, acts consistent with statutory objectives	Reports to owners quarterly, prepares audited annual report, acts consistent with statutory objectives	Reports to owners quarterly, prepares audited annual report, acts consistent with statutory objectives	Reports to owners quarterly, prepares audited annual report, acts consistent with statutory objectives
Borrowing	Council borrows, with water activity groups meeting their share of financing costs (on internal and external borrowing)	Borrowing via council or direct from Local Government Funding Agency with council financial support (guarantee or uncalled capital)	Borrowing direct from Local Government Funding Agency (with financial support from parent councils) or from banks	Borrows independently of local authorities, subject to water organisation achieving sufficient credit-quality and track record	Borrows independently of local authorities, subject to organisation achieving sufficient credit-quality and track record





Miscellaneous

Long-term contracting

Current arrangements under the Local Government Act 2002 enable local government organisations to enter contracts and joint local government arrangements with one another without restriction.

Legislation will ensure that water organisations are also considered to be local government organisations, with the maximum length of contracts to be extended to fifty years.

Extending the limit to fifty years may enable certain types of publicprivate partnerships, such as 'build, design and operate' contracts, for high capital expenditure assets. The development costs of the asset could be recovered over a longer period or match the economic life of the asset, which can lead to low costs per annum for providing this infrastructure.

Long-term contracting will be an option for all of the delivery models.

Local Government Official Information and Meetings Act 1987

Parts 1 to 7 of the Local Government Official Information and Meetings Act 1987 will apply to water all water service providers. All meetings would be open to the public except for commercially confidential matters or other matters specified in the Act.

Ombudsman

Water service providers would also be subject to the jurisdiction of the Ombudsman.





03 Governance and Accountability





Councils establish constitutions

While constitutions will not be required, they are good governance practice, and it is therefore expected that councils will establish constitutions for water organisations, with content requirements expected to include:

• minimum board size

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- rights and process to appoint and remove Directors and Board members, and
- Board member requirements.

There are no restrictions on what can be included within a company constitution provided it meets the requirements of relevant legislation.

To ensure financial separation from councils is maintained, amendment of key features of the constitutions will require agreement by super-majority (75%) of shareholders.

Shareholder council (or similar body)

Shareholding councils may also wish to provide for the establishment of a shareholder council (or similar body) to represent council interests in the entity. This body would support the coordination of multiple council interests and could play a key role in developing shareholder expectations, appointing board directors and overseeing performance.

Establishment of a shareholder council (or similar body) is not a statutory requirement but is advisable to avoid multiple interfaces between the water organisation and its owners.

Members of a shareholder council could be appointed by councils and/or trustees of consumer trusts. Unlike boards, there would be no statutory restrictions on who could be appointed to a shareholder council. The process of appointing a shareholder council could be set out in a shareholder agreement.

Accountability framework

Legislation will provide for a new planning and accountability framework for water services comprising three core components:

- Statement of Expectations to be prepared by shareholders or their representatives (such as shareholder's council), setting out shareholders' general expectations, strategic outcomes, and priorities, including any general guidance to the Board.
- Water Services Strategy this is the primary strategy and planning document for the water organisation, and will set out its strategic priorities, how it will meet regulatory requirements, service standards and financial performance objectives, and will contain projected financial statements and its long-term infrastructure strategy
- Annual report this is the primary accountability document, through which the water organisation is required to report on performance against expectations, service standards and financial performance objectives. The annual report must contain audited financial statements.

The requirements for a Water Services Strategy and Annual Report apply to all water services providers, including local authorities providing services through an internal business unit or division of council.







Shareholders are required to prepare a statement of expectations

Shareholders must prepare a statement of expectations every three years. Any matters contained in the Statement of Expectations must support and align with the legislation and any applicable regulatory requirements.

Water organisations are required to give effect to this Statement, provided it is consistent with its purpose, the water organisation's statutory objectives and other appliable statutory requirements.

Where a water organisation is owned by multiple councils, councils will be responsible for agreeing a process for preparing a joint statement of expectations. This process will not be prescribed in legislation.

An example of this may be the water organisation choosing to prioritise investment in safe drinking water in several jurisdictions (driven by quality regulation) as a higher priority over another jurisdiction where the council would like to invest in wastewater assets.

The purpose of the Statement of Expectations will include:

- stating the expectations, priorities, and strategic direction for the water organisation, and
- informing and guiding the decisions and actions of the board of the water organisation.

Legislation will require the Statement of Expectations to include information on:

- shareholders expectations and strategic priorities for the water organisation
- outcomes the shareholders expect to be achieved through the delivery of water services, and
- any specific requirements and/or obligations that relate to Treaty settlements or other arrangements that are in place with local iwi.

The Statement of Expectations may also include other matters the shareholders may wish to include, including requirements relating to:

- performance expectations
- process for collecting and responding to customer feedback on an organisation's services, and
- community engagement on specific matters of interest.

Annual reporting

Legislation will require water services providers to prepare and adopt an annual report on water services within three months of the end of each financial year

The annual report would include similar content to council annual reports under the Local Government Act, such as:

- an audited statement comparing the capital expenditure budgeted with the amount spent
- an audited statement that compares the level of service achieved in relation to each water activity with the performance target(s) for the activity
- audited financial statements, including GAAP compliant standalone financial statements for each of water supply, wastewater and stormwater.

In addition, for water organisations, the constitution may specify additional reporting requirement for the company to deliver to the company's shareholders, for example quarterly or half-yearly reports on the company's operations.



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Water Services Strategy

All providers must prepare a water services strategy

Legislation will include requirements for a Water Services Strategy, which would apply to all forms of water services provider. The purpose of the Water Services Strategy will likely include elements such as to:

- state publicly the activities and intentions of the water services provider, and the objectives and outcomes to which those activities will contribute
- provide transparency about the regulatory requirements and other expectations that apply to the provider (including for financial sustainability), how it proposes to meet those requirements and expectations, and the associated costs and levels of investment needed, and
- provide a basis for the accountability of the provider for its performance.

Process for approving

Strategies are prepared by local authorities or water organisations in accordance with the purpose and objectives set out in legislation (and needs to give effect to regulatory requirements and any statement of expectations)

Where service delivery is through a separate water organisation, shareholder council(s) and any other parties named in the constitution may comment on the draft Water Services Strategy, and the Board must consider these comments before preparing a final version

The Board must approve and deliver to shareholders a final Water Services Strategy before the first financial year to which it relates, and publish it on the council and water organisation websites

Information on water services will not be included in councils' long-term plans. All relevant strategy and planning information related to water services included in the strategy.

Contents of the strategy

Water services providers will prepare a Water Services Strategy every three years covering strategic, operational and financial planning information. This is likely to include matters such as:

- how it intends to give effect to the Statement of Expectations
- · its objectives and outcomes, including performance targets and measures
- factors impacting the provider, including population, land use, costs
- the significant activities or work the provider proposes to undertake
- proposed levels of service, including planned changes
- the key risks affecting levels of service, revenue setting and debt availability
- how the provider proposes to obtain feedback from customers
- planned water charges and financing strategy
- forecast financial statements, including forecasts of capital and operating expenditure to meet additional demand, improve the level of service, and replace existing assets
- funding impact statements, identifying the sources and application of funding for each of drinking water, wastewater and stormwater
- significant infrastructure issues over the next 30 years, the principal options for managing those issues, and indicative estimates of the projected capital and operating expenditure associated with management of water infrastructure assets.

The content required to be included in a Water Services Strategy and the process for developing it would be set out in legislation.





04 Charging, borrowing and related matters





Charging customers

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Legislation will include provisions that enable Boards of water organisations to:

- assess, set and collect water services charges, including charges for any or all of the following:
 - water supply, wastewater, and stormwater (where applicable)
 - o the initial connection to one or more of the above services
 - contributions to the capital costs of infrastructure needed to service additional demand on the network, and
 - meeting the costs that the water organisation incurs in performing and exercising it functions.
- determine how charges are assessed and invoiced, when they are due, and how they will be paid or collected.

The Legislation will include a framework to enable water organisations to identify which ratepayers should be charged for water services – which will be based on a modified version of the existing framework in the Local Government (Rating) Act 2002.

Legislation will provide for councils to share relevant billing information with water organisations to enable water companies to contact and bill their customers. Councils will be able to charge a reasonable fee for this service.

When a new water organisation is set up, there may be a transitional period until the organisation has a billing system in place. In this case, councils and water organisations can enter into a voluntary 'pass-through' billing agreement.

The legislation will also enable water organisations to use the development contributions regime in the Local Government Act 2002. This will give water organisations the ability to directly charge developers who place new or

additional demand on water infrastructure, to help recover the capital expenditure that is necessary to service that growth over the long term.

Debt collection powers

Water organisations will not have the same rates collection powers as local authorities and will instead rely on commercial debt practices to collect overdue amounts. This is similar to the situation for Watercare and other regulated utilities.

Powers of receivers

The Local Government Act 2002 and Receiverships Act 1993 contain longstanding provisions that allow a receiver to be appointed where a council defaults on a debt. Among other things, a receiver may collect rates to repay the debt.

New water organisations that borrow independently of Local Government Funding Agency will have similar provisions to ensure receivers can act appropriately in the event that a water organisation defaults on a debt.

New legislation will:

- allow the receiver to assess and collect for a given financial year both the amounts owed by the water organisation for that year and the reasonable costs incurred in collecting that amount
- prohibit the receiver from having any interest or security in water services infrastructure assets, and
- allow the receiver to collect the amount through water services charges assessed on consumers.

In the event of financial distress, relevant provisions of the Corporations (Investigation and Management) Act 1989 will also apply.





Borrowing and credit rating implications

Local Government Funding Agency

The Local Government Funding Agency will be able to provide financing to new water organisations guaranteed by its shareholders in the same way as council-guaranteed council-controlled organisations.

The Government is developing options to enable the Local Government Funding Agency to lend to new water organisations, with the aim to provide confidence to councils in suitable financial solutions.

Borrowing from Local Government Funding Agency, with the support of shareholding councils will provide a transitional step towards water organisations borrowing independently in the future.

This transition path allows time for water organisations to develop sufficiency in their revenue gathering and develop an operating track record.

Foreign currency borrowing

Legislation will explicitly allow water organisations to borrow in foreign currency. This acknowledges that many organisations will need to borrow significant amounts to meet infrastructure costs, expected to exceed the amount of New Zealand-based lending available.

Water organisations will also be allowed to enter into incidental arrangements, such as derivatives and hedges, which allow water organisations to reduce their exposure to currency risk.

Credit rating implications

The impact on local authority credit ratings of establishing a water organisation will depend on a range of factors, including key features of the proposed model adopted, ownership, and financing arrangements (including provision of any council support). Councils who are considering establishing a water organisation should obtain their own advice on the rating and financial implications prior to deciding to establish a water organisation.

With support from Crown Infrastructure Partners and its commercial advisors, the following table has been prepared as an illustrative guide of the hypothetical rating treatment based on certain scenarios and assumptions. Crown Infrastructure Partners is available to answer any questions you have about this indicative rating evaluation, including the assumptions underpinning it.

Model	Council support	Indicative rating treatment	Financing mechanism
Internal business unit or division	N/A	On balance sheet*	LGFA
Single-council water organisation	N/A	On balance sheet*	LGFA
Multi-council water organisation (with council support)	Parent council provides guarantee	Contingent liability*	LGFA
Multi-council water organisation (with no council support)	No support from parent	Contingent liability*	Banks and/or capital markets
Mixed ownership	No support from parent	Contingent liability*	Banks and/or capital markets
Consumer Trust-owned	No support from parent	Off balance sheet	Banks and/or capital markets

* Impact on council credit rating depends on council and/or water organisation revenues and debt.



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Distributions, taxation and related arrangements

Distributions

Local authorities will be able to decide whether to permit water organisations to make distributions or pay dividends to shareholders, and in what circumstances, when they establish a water organisation. Should councils wish to prevent a water organisation from making distributions to shareholders, this can be provided for in the company constitution. Economic regulation will, in certain circumstances, include a focus on the appropriateness of water charges and revenues, including considering the appropriate return on capital.

Tax status of water organisations

Most new water organisations will be exempt from income tax. This is because water organisations are not primarily engaged in commercial activities with a profit-making objective and will be owned by councils or consumer trusts.

If a water organisation is wound up, there will be a requirement that assets must be transferred to another water organisation or to a council on windup. This ensures that a taxable consumer trust or private shareholder would not receive any of the water organisation's assets (including any untaxed accumulated gains).

Exemptions from minimum requirements, outlined earlier, may affect a water organisation's tax status if they no longer meet the criteria for the income tax exemption. If a water organisation has a shareholder that is not tax exempt (such as a consumer trust that does not have charitable status) it may not be granted tax exempt status.

Rateability of land and assets owned by water organisations

Land transferred to water organisations will be rateable. Legislation will require land owned by water organisations, and assets that are owned by the organisation but located on or under land the organisation does not own, should be rateable. This aligns with the way that land and assets of other network providers, such as electricity and telecommunications companies, are rated.

Councils may elect to remit those rates if they decide that the water organisation, which they will likely be shareholders in, should not have to pay them.

Civil Defence Emergency Management costsharing arrangements

Legislation will ensure that Civil Defence Emergency Management costsharing arrangements with the Crown would apply directly to water organisations. This will ensure financial separation of water organisations and allow them to directly seek partial reimbursement from the Crown for emergency expenses.







Modernised powers and stormwater services

Modernised powers to carry out work on land and control connections

Legislation will include modernised provisions relating to water infrastructure and service including:

- Powers for water service providers to control connections to water services and infrastructure. These are powers that enable councils to approve connections by private individuals or businesses to water supply, wastewater and/or stormwater infrastructure, and include the ability to set design or engineering requirements.
- Powers for water service providers to carry out work on land in relation to water services infrastructure. These are powers that are required by all kinds of utility providers (water, telecommunications, electricity, and gas) to ensure infrastructure can be constructed or maintained, particularly where it is on private property or underground.
- An updated approach to the bylaws relating to water services. The current system of bylaws will be replaced or supplemented with new, fit-for-purpose statutory provisions, including requirements for management plans and enforcement rules. This will enable more effective and consistent management, while still addressing local issues and needs.

These changes will allow water services providers to control and protect drinking water catchments and manage trade waste. The legislation will include transitional provisions to provide for how local authorities and water services providers will transition to the new system over time.

Arrangements for the management and delivery of stormwater services

Councils will retain legal responsibilities for the management of stormwater services, but that can choose to:

- continue to deliver stormwater services in-house and contract aspects of stormwater service delivery to a new water organisation
- transfer aspects of stormwater service delivery (this might include stormwater network assets*) to a water organisation, and
- contract aspects of stormwater service delivery to a third-party provider, via long-term contract or public-private partnership.

Councils can determine the levels of service and performance targets for the delivery of stormwater management services. Water service organization identify the costs of delivering stormwater management services that meet the expected levels of service and meet performance targets.

Councils may continue to collect revenue through rates from residents and businesses for stormwater management services. Revenue for the delivery of stormwater management services would need to be identified separately within council's accounts (ring fenced). Depending on the stormwater services or assets that are transferred to a new water organisation, how revenue is collected may be allocated between councils and the water organisation.

* Councils will need to consider this on a case-by-case basis as part of any transfer arrangements, including whether or not it is appropriate to transfer any assets as well as determining appropriate funding mechanisms.







Wellington Region Water Services Delivery Planning Recommended regional approach to a joint Water Services Delivery Plan and delivery model

October 2024



















Absolutely Positively Wellington City Council Me Heke Ki Pôneke



LIMITATIONS AND DISCLAIMER:

Purpose of the report

This report aims to provide information to support decision making by councils on whether to develop a joint Water Services Delivery Plan (WSDP), and joint delivery model with other councils in the region.

The report does not represent the position of any of the councils involved in this process. Rather, it outlines a recommended 'best for region', concept-level delivery model for a regional Water Services Council Controlled Organisation (WSCCO) to deliver water services in the region, should councils decide to adopt this approach. It follows the requirements of Government policy and legislation and provides a robust strategic-level analysis of the case for change and investment required. This report is not intended to fulfil the statutory requirements for a WSDP nor be a basis for investment decisions. A full WSDP along with further development and decisions on the proposed delivery model will need to be developed by councils later, based on the confirmed approach and in line with the requirements of legislation. Councils will need to separately consider and evaluate alternative options in relation to the recommended model to inform decision making.

Limitations of information and analysis

The analysis set out in this report in relation to the current state of the water services network has been based on best available information and is intended as a strategic and directional-level analysis to inform decision making on an approach to a WSDP, rather than the level required to complete a WSDP or to inform investment decisions. Where possible, the sources and limitations have been noted. As new or more robust information becomes available, this will be used to further inform and refine the analysis. Key assumptions, sources of information and levels of confidence are set out in Appendix C. This includes how information has been verified where possible, including through discussions with council officers and Wellington Water (WWL) staff to ensure accuracy and correct interpretation. There are a number of documents referenced in this report, (such as the draft Entity G Asset Management Plan) that were developed by the Department of Internal Affairs (DIA) but never finalised. These have been relied upon in the absence of other information in order to significantly reduce the time and costs of this process. As noted, reasonable efforts have been made to cross-check such information with other sources.

It should be noted that:

- Forecasts almost always turn out incorrect, especially over a 30-year horizon.
- There is great difficulty in estimating investment requirements over the next 30 years, given poor information on asset condition, lack of detailed engineering assessment of what is required to address water quality to match the proposed water quality standards, and uncertain growth investment.
- Choices need to be made over a myriad of modelling approaches, inputs, and assumptions that reasonable minds may disagree with over some decades.
- There is a range of decisions yet to be made and legislation to be enacted to give effect to reform of water services.
- All modelled network economics figures should assume to have a +/-20% accuracy, such as in relation to revenue, investment and debt over the 30-year period, which is considered a sufficient level of accuracy for strategic decision-making purposes at this stage. Some of these, such as the available asset condition metrics, are known to be weak.
- However, based on the analysis of information and cross-checking, there is a relatively high level of confidence that the analysis is directionally correct and sufficiently robust to support the strategic level of analysis in this report and the decision making that it is intended to support.
- As noted, the detail will be subject to ongoing refinement and change as more accurate, specific information is identified and councils complete the required detail in a WSDP.
- This analysis and report structure is aligned with the requirements of the Local Government (Water Services Preliminary Arrangements) Act 2024 in relation to the content of a WSDP as outlined in Appendix A.



Prepared by:	Scott Consulting Ltd
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Contents

Abb	Abbreviations		
Foreword7			
Exe	cutive Summary	. 8	
Pur	pose of this report	.15	
Sec	tion summary	15	
1.	Purpose of this report	15	
2.	Legislative requirements	16	
3.	Council decisions	18	
Reg	ional approach	.19	
Sec	tion summary	19	
4.	Wellington Region and the Horowhenua District	19	
5.	Challenges and change for local government	21	
6.	A regional approach to water services delivery planning	22	
7.	What is important for our region	23	
8.	The role of Greater Wellington Regional Council	25	
9.	Engagement and consultation	26	
Cur	rent state of the network and case for change	.27	
Sec	tion summary	27	
10.	An agreed need for change	28	
11.	Summary of key regional challenges	29	
12.	Summary of key issues by council	32	
13.	Current state of the water services network	35	
14.	Current levels of service and delivery models	39	
15.	Enabling growth	44	
16.	Compliance	48	
17.	Current and required expenditure and funding	50	
Opt	ions and recommendations for a regional delivery model	.53	
Sec	tion summary	53	
18.	Process to test options for a joint WSDP and joint delivery arrangements	54	
19.	Type of model	54	
20.	Design principles and assumptions	56	
21.	Ownership and governance	60	
22.	Treaty obligations, principles and partnership	63	
23.	Joint arrangements and stormwater management	64	
24.	Customer model and local service delivery	66	



25.	Capability and capacity development
Fina	ancial sustainability of water services69
Sec	tion summary69
26.	Financial sustainability
27.	Approach to modelling
28.	Scenarios
29.	Investment sufficiency - Level of investment required
30.	Revenue sufficiency - Revenue required and affordability
31.	Financing sufficiency - Financing and borrowing77
32.	Potential for efficiency gains and economies of scale
Eva	luation of the recommended regional delivery model81
Sec	tion summary
33.	Assessment of options
34.	Evaluation of recommended model
35.	Other key assumptions
36.	Other key risks and challenges
Imp	lementation considerations
Sec	tion summary
37.	Next phases of work
38.	Implementation plan
39.	Engagement and consultation
40.	Indicative time and cost for Phase 2
41.	Indicative timeline and cost for Phase 3 – establishment of a WSCCO
42.	Key transition principles
43.	Next steps
App	98 oendices



Abbreviations

AOG	Advisory Oversight Group
AMP	Asset Management Plan
Bill 3	Local Government Water Services Bill (expected to be introduced in December 2024)
CCO	council-controlled organisation
COC	council-owned company
DIA	Department of Internal Affairs
EoSL	end of service life
FDS	The Wairarapa-Wellington-Horowhenua Future Development Strategy 2024–2054
FFO	funds from operations
FTE	full time equivalent
FY	financial year
GDP	gross domestic product
GWRC	Greater Wellington Regional Council
НВА	2023 Wellington Regional Housing and Business Capacity Assessment
LGA	Local Government Act 2002
LGFA	New Zealand Local Government Funding Agency
LGOIMA	Local Government Official Information and Meetings Act 1987
LOS	level of service
LTP	Long-term Plan
MoU	Memorandum of Understanding
NPS-FM	National Policy Statement for Freshwater Management
ра	per annum
Preliminary Arrangements Act	The Local Government (Water Services Preliminary Arrangements) Act 2024
WICS	The Water Industry Commission for Scotland
WSCCO	water services council-controlled organisation
WSDP	water services delivery plan
WSS	water services strategy
WWC	Wellington Water Committee
WWL	Wellington Water Limited



Foreword

Everyone in the Wellington Region relies on our water services. These are critical to enable the health, well-being and economy of our towns and cities. However, it is also very easy to take water for granted, until something goes wrong.

All of us in the region have directly experienced some of the issues we face with our water services – whether that is an old water pipe bursting on a Wellington street, water shortages meaning you can't water your garden over summer or the impacts of stormwater or sewage on swimming spots.

Our drinking water, wastewater and stormwater services need fixing. We know it will be expensive and will take an ongoing effort. We want to ensure safe, reliable and sustainable water services so the Wellington Region can be more resilient, restore Te Mana o te Wai, enable new homes to be built, and safeguard the well-being of our communities.

The overall state of our water services network is simply not good enough. Water supply services are often unreliable, with old pipes resulting in about half of the water supply for the metropolitan area being lost through leaks.

We know our region has a significant backlog of investment in three waters infrastructure. To address this, enable new housing growth and maintain the network, we estimate for the greater Wellington area, about \$15-\$17 billion needs to be invested in water infrastructure over the next 20-25 years.

If delayed, we risk significant network failure, further deterioration and increased costs for more 'fixes'. We won't be able to build the 99,000 new homes that are needed across the region for a growing population. Our major wastewater treatment plants will continue to fall short of environmental standards and our drinking water supplies may be compromised. And we push this issue on to future generations.

There is no easy fix. The Government is putting in place legislation which will change how we manage water and is changing funding limits so councils can address the issues we face. Councils must make some bold and brave decisions with the backing of our communities. We need to be confident that we are making the best choices to address the critical challenges, that are deliverable and financially sustainable.

There is a need to increase revenue and effective use of borrowing to ensure cost increases are more affordable for households. This will be a significant challenge and will need to be carefully managed working with the water sector to find ways to do this work more efficiently.

While different parts of the region may have different priorities, all of us face issues with water services. This is everyone's problem, and it makes sense for us all to work together to turn the tide.

Taking a broader regional view will give councils confidence to make some hard decisions in the best interests of our region as a whole. This document aims to support this process. Many options have been worked through to find a better pathway forward. I urge both council officers and elected members to carefully consider the recommendations here.

I would like to extend my thanks to members of the Advisory Oversight Group and everyone involved in this report, which has been shaped by many people's expertise and hard work. It is an example of how well we can work together.

"Nāu te rourou, nāku te rourou, ka ora ai te iwi – With your food basket and my food basket, the people will thrive."

Suder gast

Dame Kerry Prendergast Chair of the Advisory Oversight Group



Executive Summary

Troubled waters

Water services in much of New Zealand, including the Wellington Region, are suffering longstanding and serious challenges, mainly due to a lack of sufficient investment over a long period.

Transformational reform is needed with significant and sustained investment over coming decades to fix the network, which is at risk of critical failure in places. Urgent attention is also needed to enable new housing growth, provide safe drinking water, improve environmental water quality and enhance resilience.

The Government is introducing legislation to address New Zealand's water services, with a requirement that all local councils and Greater Wellington Regional Council (GWRC) must prepare a Water Services Delivery Plan (WSDP) by September 2025. This may include establishing a new organisation to deliver water services.

Councils within the Wellington Region face some stark decisions and challenges in preparing a WSDP and meeting all the requirements and investment needed to improve water services, including drinking water, wastewater, stormwater, infrastructure and storage.

The purpose and limitations of this report

Under the Local Government (Water Services Preliminary Arrangements) Act 2024 (the Preliminary Arrangements Act), councils need to confirm their approach to a WSDP – whether they want to develop a joint WSDP with other councils and the extent of any joint arrangements; for example, for all or only some water services.

This report aims to provide information to support decision making by councils on whether to develop a joint WSDP, and joint delivery model with other councils in the region.

The report does not represent the position of any of the councils involved in this process but rather outlines a recommended 'best for region', concept-level delivery model for a regional Water Services Council Controlled Organisation (WSCCO) to deliver water services in the region, should councils decide to adopt this approach.

In the course of the decision-making process on the WSDP, councils must assess both their existing service delivery model and the option of establishing, joining or amending a WSCCO or a joint local government arrangement. If they choose, they may also consider other options for delivery of water services. The assessment of (at least two) alternatives needs to be credible with sufficient information to ensure decision-makers can reach a properly informed view.

This report does not deal with the assessment of the status quo delivery model in each district, or potential options for delivering water services other than the recommended model, as these are matters for each council to consider.

The report follows the requirements of Government policy and legislation and provides a robust strategic-level analysis of the case for change and investment required. This report is not intended to fulfil the statutory requirements for a WSDP nor be a basis for investment decisions. A full WSDP will need to be developed by councils later along with further development and decisions on the proposed delivery model, based on the confirmed approach and the requirements of Bill 3 (Local Government Water Services Bill).



A regional approach

The nine councils within the Wellington regional area, and Horowhenua District Council, signed a Memorandum of Understanding (MoU) in May 2024 to work together on a joint WSDP process. This included GWRC on the basis of its role as bulk water provider to the Wellington metropolitan area.

An Advisory Oversight Group (AOG) was established with elected member representatives and Iwi/Māori partners. This is supported by a Chief Executives' steering group, project team, joint budget and an agreed development process. The councils and Iwi/Māori partners made a commitment to work together through a collaborative and non-binding process, which does not transfer any formal decision-making responsibilities or delegations from any council. Each council within the Wellington Region still needs to make their own decisions on a WSDP and a preferred model for delivering water services in future.

The AOG has helped to test options and provide direction on a set of key requirements for a possible regional WSDP. They identified an agreed goal to: *ensure the delivery of safe, reliable, environmentally and financially sustainable water services so the region can be resilient, restore Te Mana o te Wai, and enable new homes and the well-being of communities.*

Current state of the network and case for change

Every day, millions of litres of safe drinking water are delivered to homes across the region and millions of litres of wastewater are safety treated and discharged. This relies on the hard work and dedication of more than 1,000 local people, who work directly on three waters networks for councils, Wellington Water Limited (WWL) and a range of partners, contractors and suppliers. Their day-to-day mahi and commitment to water services on behalf of the people in the region should be recognised and celebrated.

However, the Wellington Region also faces significant failure and deterioration in water infrastructure, with a risk of network fault runaway¹ in parts of the network. There are significant constraints to growth and new housing in many areas, with the need to meet regulatory standards and compliance requirements for water, and to build better seismic, network, and climate resilience. Challenges with current delivery models include lack of scale, workforce skills and capacity, and funding.

While not all councils have the same issues, all councils in the region have major challenges to address. About 45% of all drinking water in the metropolitan area of Wellington is lost to leaks. While the quality of asset condition information is very poor, across the region an average of about 21% of the total three water pipe infrastructure has been assessed as worn out. Wastewater is generally in the worst condition with about 33% of the pipes worn out. Many wastewater treatment plants are failing to meet compliance requirements and need large-scale replacement or investment, with immediate risks of structural failure of some wastewater pipes.

The costs for repairing and strengthening regional water services will be substantial. To address the backlog of investment needed in three waters infrastructure, to enable growth and maintain the network, it is estimated about \$15-\$17 billion of investment in the water network will be required over the next 20-25 years.

While councils are planning significant investment to manage these risks, combined Long-term Plan (LTP) investment over the next ten years is about \$4.82 billion (real), which is approximately \$470 million (or about 10%) less than the estimated investment required based on the recommended investment strategy in this report over the next 10 years and about 30-40% less than what will be required, on average over the next 20-25 years.

¹ Network fault runaway occurs when the operational capacity to fix faults is exceeded by the fault rate. The consequences of this include extended periods of water outages, sewage spills, and localised flooding.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



The evidence in this report confirms the need for change. The status quo cannot continue and, under the requirements for developing a WSDP, councils will need to make some difficult choices about how to fund and deliver the urgent work needed on the three waters network and demonstrate financial sustainability by 30 June 2028.

Options and recommendations for a regional delivery model

The process has included working through a range of options and considerations to inform 'best for region' options for a joint WSDP and a concept-level design for a future delivery model. The councils have taken a collaborative approach, facilitated by a joint regional team, based on a series of workshops with the officers, council Chief Executives and the AOG to consider options and alternatives, provide feedback and direction.

This process has included:

- confirming what success looks like through identification of the key requirements for councils and a shared goal,
- consideration of the state of the network, level of investment required and case for change,
- consideration of how financially sustainable delivery of water services will be achieved by 30 June 2028,
- testing a range of possible structures and models for a joint WSCCO, including in-house delivery models; Council Controlled Organisation (CCO); a consumer trust; and a private sector option (which was not supported due to opposition to the privatisation of water), and
- development of governance and oversight arrangements, including design principles and assumptions for a new entity, including the relationship between the proposed WSCCO, councils and other key players.

While the model will need to be fully designed and confirmed in subsequent phases of work in line with Bill 3, the recommended delivery model is for a joint council-owned company, (that is, a full-breadth water utility vested with ownership of all regional water assets, revenues and liabilities). This would have a similar structure to a CCO under the Local Government Act 2002 (LGA) but with reduced council oversight, enabling the company to have greater control and certainty over investment plans and clarity of accountability.

The entity would be within the new class of financially independent water CCOs, which according to Government policy announcements on 8 August 2024, will be provided for in Bill 3 to be introduced into Parliament in December 2024.

The new WSCCO model will operate in a much more regulated environment, providing a strong focus on assurance, quality, delivery and value for money. The primary relationship of a WSCCO will be with its customers, not its shareholders (or owners). Council direction and oversight would therefore be less than under traditional CCO models. The new entity needs the independence and accountability to deliver. A skills-based Board with a clear set of competencies is at the heart of the recommended governance model.

Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, response times and supply. The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided.

Financial sustainability

A WSDP will need to demonstrate how financially sustainable delivery of water services will be achieved by 30 June 2028. This requires confirmation of:



- 'investment sufficiency' projected investment is sufficient to meet levels of service, regulatory requirements and provide for growth,
- 'revenue sufficiency' sufficient revenue to cover the costs (including servicing debt) of water services delivery, and
- 'financial sufficiency' funding and financing arrangements are sufficient to meet investment requirements.

This document does not provide this level of detail but does provide a strategic level of analysis of these matters to ensure councils to have sufficient understanding of the level of investment required and a potential pathway to financial sustainability including opportunities to use new financing arrangements to help manage cost increases.

The new entity would be able to raise significant long-term debt. The Government recently confirmed that the New Zealand Local Government Funding Agency (LGFA) will:

- provide financing and increased levels of borrowing to support WSCCOs,
- treat borrowing by water organisations as separate from borrowing by parent council or councils, and
- lend to multiple-owned water organisations, that are financially supported by the parent councils. It is important to note that financially supported means either a guarantee or uncalled capital will be required from councils to match the liabilities of the water CCO.

After consideration of a range of investment scenarios, the recommended investment strategy to ensure financial sustainability is based on increased debt and pricing to enable an investment programme that will 'keep up' with network maintenance, 'catch up' on the backlog of worn-out infrastructure, 'build up' network capacity to enable growth and 'clean up' wastewater and stormwater to improve discharge standards by upgrading assets as they are replaced at end-of-life.

To ensure that this strategy is affordable, careful use of long-term financing will be required to smooth and balance cost increases over time. This is expected to result in a more affordable rate of increased costs to water consumers than would otherwise be possible under current local government funding arrangements.

It is estimated that it will take about 20-25 years to replace worn-out parts of the network and ensure substantial environmental compliance. It is also possible to extend the time for this catch-up period, which may result in lower costs but is likely to result in increased risk of network failure and consequential failure and repair costs.

The actual investment and therefore financial strategy and price path will be informed by development of the WSDP and then implemented by a WSCCO. This will be done in the context of a new economic regulator that will have a strong focus on quality and price based on the actual cost to provide sustainable networks and services.

A range of scenarios has been modelled to provide an indication of average potential price increases across the region and do not reflect the actual cost to serve a particular local area, existing prices or an agreed price transition. Under all scenarios modelled, prices will need to increase to address the backlog of investment needed. Price rises will need to be managed through the use of financing tools and effective and efficient targeting of the works required. Based on the scenarios modelled:

• Price rises could be up to 9% per annum on average across the region to address the backlog of investment in the network. This rate of price increase will need to be managed through financing arrangements and/or the level of investment undertaken.



• The average price per connection across the region in 2024 is \$1,711². The amount that this increases could be up to twice current prices or a peak of about \$3,000 to \$4,000. However, it may be possible to reduce this peak price through financing arrangements and a sustainable price is estimated at about \$2,596 when the catch-up phase is completed in about 20 years' time. This sustainable price is about 51% above the level of current charges, meaning that this level of increase could be gradually managed over time.

To manage affordable changes in prices, key assumptions include:

- Economic regulation will include a core principle that water prices must be based on the cost to provide services to the relevant group of customers.
- The WSCCO will need to work with the economic regulator to develop and agree a pricing and revenue strategy that will balance price and quality.
- The WSCCO will use LGFA financing arrangements and additional debt headroom to manage rate of cost increases.
- People across our region currently pay different amounts for water services depending on where they live and whether water use is metered. These existing price differentials will be locked in for a three-year transitional period to help ensure that consumers do not receive a major price shock.

Evaluation of the recommended model and benefits

All councils will need to assess both the WSCCO model and the status quo, and if they choose, other service delivery options during their decision-making process.

This report does not deal with those assessments, but rather evaluates a recommended regional option in relation to the key requirements and other key factors, including the Government's minimum requirements, cost to implement, risks, level of benefits and political acceptability. For each factor, the relevant benefits, risks, challenges and key assumptions have been identified.

This evaluation will help councils to undertake a comparative analysis in relation to the status quo and any other identified options.

Some of the identified benefits of the recommended model include:

- ongoing public ownership through shareholding councils,
- replacement of about 44% of the network over the next 20 years,
- new homes and growth,
- better resilience,
- scale to enable efficiency and continuous improvement,
- focus on affordability through more effective use of funding and financing arrangements than are currently available to local councils,
- better compliance and network performance through more investment,
- customer focus and local delivery,
- clarity of accountability, and
- long-term approach to planning and investment.

² Based on 2024 costs.



Implementation considerations

Legislation requires councils to have a WSDP by September 2025. Therefore, decisions on subsequent phases of work to consider a joint WSDP and WSCCO are expected to be made on an in-principle basis by late 2024 to enable this work to be progressed.

Work from late 2024 will need to focus on development and delivery of the WSDP. Councils will need to undertake communications, engagement and formal consultation (on at least the part of the WSDP that outlines the proposed service delivery model) during this time, as well as implementation planning. This will involve some significant decision making in relation to the development and adoption of a WSDP that meets councils' legislative obligations, as well as establishing any joint arrangements for the delivery of water services, with early establishment resources, accountabilities and funding.

The draft regional WSDP will need to be aligned with the legislative requirements and will include asset condition information and a related AMP; funding, financing and revenue requirements; the proposed model for delivering water services, including meeting compliance requirements; and an implementation plan, including timeframes and milestones.

Implementation planning will consider the potential establishment of a large full-service, multicouncil-owned WSCCO, which would be entrusted with the stewardship of critical regional assets with a replacement value of about \$19 billion. This will also have a significant impact on councils including future role, operating model, financial arrangements and scale.

Details regarding the structure, accountabilities, decision-making rights and resourcing will need to be finalised. Decisions will need to be made on a high-level operating model and organisational design, a service delivery model, change process and strategy, as well as information systems, legal, procurement, costs, budget and funding. The strategy, processes and principles will also need to be established for debt and asset transfer, pricing, contract transfer, people transition, customer experience and billing. This report gives an indicative timeline and costs, with key transition principles that will need to be followed.

Next steps

The recommended regional model is well aligned with the key requirements set by councils, legislation and recent Government policy announcements.

To meet the legislated deadline, councils need to maintain momentum by:

- considering the recommended regional model and deciding whether to develop a joint WSDP with other councils,
- assessing status quo, an alternative model (may or may not be recommended regional model) and, if they choose, additional reasonably practicable alternatives,
- making in-principle decisions on the proposed model by late 2024 in order for this to be further developed,
- consulting on draft WSDP (at least on proposed delivery model) from late 2024 and into 2025,
- considering the implications for council, including the need to amend the LTP,
- adopting the WSDP (and any LTP amendment), and
- planning for implementation of WSDP in 2025 (especially if the new model is adopted).



Table 1: Summary of recommended regional model

Aspect	Key features
Councils and ownership	 Public ownership through council-owned organisation. Ownership rights in constitution/shareholder agreement. Full-breadth water utility with ownership of all regional water assets, revenues and liabilities.
Governance	 Empowered to operate independently with ability to prioritise investments. Shareholders' panel appoints an independent, skills-based Board (not representative-based Board). Key skills: commercial, asset management, network utilities, Treaty of Waitangi, customer, local government, and local knowledge.
lwi/Māori	 Treaty of Waitangi obligations are honoured. Governance role confirmed through constitution. Range of enduring relationships and Memorandum of Understanding.
Customer	 Key relationship is with customers including service and billing. Customer interests supported by economic regulator. Local service delivery model backed by capability and scale to deliver efficiency.
Strategy	 Shareholders agree Statement of Expectations. WSCCO prepares Statement of Intent, Annual Plan and Water Services Strategy (WSS).
Accountability and regulation	 Statutory objectives per Bill 3. Annual reporting and public meetings. Oversight from regulators – Taumata Arowai, Commerce Commission, Regional Council(s). Single point of accountability for service delivery. Financially sustainable and compliant with regulation.
Borrowing	 Borrowing initially from LGFA based on debt covenants. Focus on affordability through effective use of funding and financing arrangements. Certainty to plan, fund and invest optimally with confidence that it has committed access to long-term funding at a reasonable cost.


Purpose of this report

Section summary

The Government is in the process of introducing legislation to address New Zealand's longstanding water infrastructure challenges. This includes a requirement under the Preliminary Arrangements Act that councils must prepare and submit to the Secretary of Local Government a WSDP by September 2025.

This report aims to provide information to support decision making by councils on whether to develop a joint WSDP and joint delivery model with other councils in the region.

It follows the requirements of Government policy and legislation and provides a robust strategic-level analysis of the case for change and investment required. The report does not represent the position of any of the councils involved in this process but rather outlines a recommended 'best for region', concept-level delivery model for a regional WSCCO to deliver water services in the region, should councils decide to adopt this approach.

This report is not intended to fulfil the statutory requirements for a WSDP nor be a basis for investment decisions. A full WSDP will need to be developed by councils later, based on the confirmed approach.

This report outlines a recommended delivery model for a regional WSCCO to deliver water services in the region, should councils decide to adopt this approach.

It is not intended to support other subsequent decisions by councils which may be necessary, such as whether to adopt a WSDP. Such decisions will be supported by further analysis and advice.

1. Purpose of this report

This report was commissioned by the nine councils in the Wellington Region and Horowhenua District Council to respond to the direction of the Government's Local Water Done Well³ policy. This collective approach is discussed in more detail in the Regional Approach section of this report.

Local Water Done Well signalled an expectation that councils would prepare a WSDP within 12 months of legislation providing for the WSDP being enacted and that councils would consider collective approaches to the delivery of financially sustainable water services.

The purpose of this report is to provide information to support decision making by councils on whether to develop a joint WSDP, and joint delivery model with other councils in the region. Councils will need to separately consider and evaluate at least the status quo and may also consider other alternative options in relation to the recommended model to inform decision making.

³ https://www.dia.govt.nz/Water-Services-Policy-and-Legislation.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model 15



This report provides a regional analysis of:

- **Current state of the network and case for change**. This looks at why change is needed and the scale of the problem. This includes analysis of the level of investment required to fix the poor condition of much of the network, maintain the network, enable new housing, and ensure compliance with drinking water and environmental regulation.
- Options and recommendations for a regional delivery model. This includes a range of considerations for different types of models, governance and delivery. This section sets out a recommended concept model for a new WSCCO and looks at the importance of quality local service.
- **Financial sustainability of water services**. This outlines an investment strategy and potential financing arrangements to demonstrate how financially sustainable delivery of water services can be achieved by 30 June 2028 including investment, revenue and financing sufficiency.
- Evaluation of the recommended regional delivery model. This considers how well the recommended model meets key requirements as well as an assessment of key benefits, challenges and risks.
- Implementation considerations. This includes indicative time and costs, engagement and consultation with the community and looks at 'where to now'.

Limitations and disclaimer

Please refer to the limitations noted on page 2 of this report. In particular, it is noted that this report provides a strategic-level analysis of the case for change, a concept-level design for a recommended delivery model for a regional WSCCO, which councils will be empowered to establish under the Local Government Water Services Bill (Bill 3), and an investment strategy to inform how financially sustainable delivery of water services can be achieved by 30 June 2028 including investment, revenue and financing sufficiency.

This report is **not** intended to fulfil the requirements of a WSDP nor provide the basis for investment decisions or future pricing. Development of a full WSDP will need to be completed by councils during late 2024 and 2025 based on the confirmed approach.

2. Legislative requirements

Local Water Done Well is the Government's plan to address New Zealand's long-standing water infrastructure challenges.

It recognises the importance of local decision making and flexibility for communities and councils to determine how their water services will be delivered in the future.

It will do this while ensuring a strong emphasis on meeting economic, environmental and water quality regulatory requirements. Key components of Local Water Done Well include:

- Fit-for-purpose service delivery models and financing tools.
- Ensuring water services are financially sustainable.
- Introducing greater central government oversight, economic and quality regulation⁴.

Local Water Done Well is being implemented in three stages, each with its own piece of legislation.

Bill 1: Water Services Acts Repeal Act 2024. This repealed the previous Government's water reforms legislation.

⁴ https://www.dia.govt.nz/Water-Services-Policy-and-Legislation.

Bill 2: The Local Government (Water Services Preliminary Arrangements) Act 2024 establishes the Local Water Done Well framework and the preliminary arrangements for the new water services system. This was enacted on 2 September 2024.

The Preliminary Arrangements Act lays the foundation for a new approach to water services management and financially sustainable delivery models that meet regulatory standards.

Key areas included in the Preliminary Arrangements Act are:

- 1. Requirements for councils to develop WSDPs by 3 September 2025.
- 2. Requirements that WSDPs outline future water services delivery arrangements, and for councils to commit to an implementation plan.
- 3. Requirements for councils to include in their WSDPs baseline information about their water services operations, assets, revenue, expenditure, pricing, and projected capital expenditure, as well as necessary financing arrangements, as a first step towards future economic regulation.
- 4. Streamlined consultation and decision-making processes for setting up future water services delivery arrangements.
- 5. Provisions that enable a new, financially sustainable model for Watercare, including the appointment of a Crown monitor for the interim regulation of Watercare.
- 6. Interim changes to the Water Services Act, which mean the Te Mana o te Wai hierarchy of obligations in the National Policy Statement for Freshwater Management (NPS-FM) will not apply when Taumata Arowai sets wastewater standards.

Bill 3: In August 2024 the Government outlined key Local Water Done Well policy decisions, including those that will be reflected in the proposed Local Government Water Services Bill (Bill 3).

The Government will introduce Bill 3 in December 2024 that will establish the enduring settings for the new water services system. This will set out a range of changes to the water services delivery system and to the water services regulatory system. This includes:

- New water services delivery models for councils to choose from, including new water organisations that can be owned by councils and/or consumer trusts,
- Minimum requirements for local government water services providers,
- A new economic regulation regime for local government water services providers, to be implemented by the Commerce Commission,
- Changes to improve the efficiency and effectiveness of the drinking water regulatory regime, and the approach Taumata Arowai takes to regulating the regime,
- Changes in the approach to applying Te Mana o te Wai, affecting drinking water suppliers as well as wastewater and stormwater networks,
- A new approach to managing urban stormwater, including changes to improve the management of overland flow paths and watercourses in urban areas, and
- Changes relating to wastewater environmental performance standards and national engineering design standards.

The announcements in August 2024 included confirmation of financial arrangements that the LGFA will provide financing to support water council-controlled organisations⁵ (CCOs and trusts). LGFA will extend its existing lending to new water organisations that are CCOs and are

⁵ 'Water services provider' is defined as meaning all forms of local government provider and including councils that continue with direct (in-house) delivery as well as new water organisations. The term 'water organisation' refers only to separate organisations that councils may establish to provide water services and does not include councils with direct (in-house) delivery.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model 17



financially supported by their parent council or councils. It is important to note that financially supported means either a guarantee or uncalled capital will be required from councils to match the liabilities of the water CCO.

LGFA will support leverage for water CCOs based on an assessment of operating revenues, subject to water CCOs meeting prudent credit criteria. LGFA will treat borrowing by water CCOs as separate from borrowing by their supporting parent council or councils. These same lending arrangements would not apply to in-house delivery models.

3. Council decisions

Under the provisions of the Preliminary Arrangements Act, councils need to make a series of decisions. Some of these will be decisions required under the LGA, or the Preliminary Arrangements Act, while others will be non-statutory.

These non-statutory decisions may be tactical decisions to inform the project scope and approach, or strategic decisions (for example, to develop a joint WSDP) that are precursors to formal statutory decisions.

Key decisions councils may need to make include:

- 1. **Confirming the approach to a WSDP**: Whether to develop a joint WSDP with other councils and the extent of joint arrangements, for example, for all or some water services. (Sections 10 and 11 of the Preliminary Arrangements Act)
- 2. Consultation:
 - a. Whether to consult on the draft WSDP beyond the proposed model for service delivery (which must be consulted on), and when and how to consult.
 - b. The timing and approach to decision making, e.g., in relation to CCO establishment and governance, (should council plan to establish a new delivery model).
- 3. Implementation:
 - a. Whether to adopt a WSDP (Section 17 of the Preliminary Arrangements Act).
 - b. Whether to establish a new service delivery model.

This report aims to support decision number 1 above, *Confirming the approach to a WSDP*. Ongoing analysis and development of a WSDP will be required to support decisions 2 and 3 and to ensure councils have confidence that they are able to give effect to the WSDP. To enable this, a three-phase programme has been established, with indicative decision points (and potential exit gates) for councils at the end of Phases 1 and 2. See more detail in Section 37 of this report: *Next phases of work*.



Regional approach

Section summary

Local government is under considerable pressure to address current water service issues as well as the complex and evolving challenges ahead. The nine councils within the Wellington regional area and Horowhenua District signed a Memorandum of Understanding in May 2024 to work together on a joint WSDP process.

A joint elected-member governance group (the Advisory Oversight Group) was established alongside lwi/Māori partners, a Chief Executives' steering group, project team, joint budget and an agreed development process. Our councils and lwi/Māori partners have made a commitment to work together through a collaborative and non-binding process.

The process does not transfer any formal decision-making responsibilities or delegations from any council. Decisions on the WSDP, preferred models or commitments to future change remain with each council. There are points in the process where councils will need to reconfirm their commitment to remaining part of the collective. Any council may choose to leave the collective at any point.

The Advisory Oversight Group (AOG) has helped to progressively test and provide direction on a set of key requirements for a regional WSDP. It also identified an agreed goal to: **ensure the delivery of safe, reliable, environmentally and financially sustainable water services so the region can be resilient, restore Te Mana o te Wai and enable new homes and the wellbeing of communities.**

As well as considering at least the status quo as an alternative to a WSCCO, councils will need to undertake a process of engagement and formal consultation on at least part of the WSDP from late 2024 and into 2025, in line with legislation.

4. Wellington Region and the Horowhenua District

The councils working together in the Wellington Region and Horowhenua District include GWRC and nine territorial authorities:

- Horowhenua District Council
- Kāpiti District Council
- Porirua City Council
- Wellington City Council
- Hutt City Council
- Upper Hutt City Council
- South Wairarapa District Council
- Carterton District Council
- Masterton District Council.



Represented by the four Iwi/Māori representatives on the AOG (see Table 3 below), the Iwi/Māori partners in this regional area include:

- Rangitane o Wairarapa
- Ngāti Kahungunu ki Wairarapa Tamaki Nui-a-Rua Treaty Settlement Trust
- Ngāti Kahungunu ki Wairarapa Rūnanga
- Ngāti Kahungunu ki Wairarapa Tāmaki-Nui-a-Rua PSGE
- Rangitāne Tu Mai Rā Trust PSGE
- Rangitāne o Wairarapa Inc Rūnanga
- Te Atiawa ki Whakarongotai
- Ngā Hapū o Ōtaki
- Ngāti Toa Rangatira/Te Rūnanga o Toa Rangatira
- Muaūpoko Tribal Authority
- Te lwi o Ngāti Tukorehe Trust
- Te Tumatakahuki (rōpū of Raukawa hapū representatives within the Horowhenua)
- Te Runanga o Raukawa.

Figure 1: The nine territorial authorities and Greater Wellington Regional Council



Table 2: Wellington Region population inclusive of Horowhenua⁶

Regional population 2024:	~588,000
Regional population projection 2054:	Up to about 775,000 ⁷
Number of households 2024:	~224,000
Number of households 2054:	~323,000
Percentage of households served by connected water networks:	~89-90%
GDP per capita:	Wellington Region data was reported at \$NZ86,805 GDP in 2023 ⁸
Land area:	813,500 hectares ⁹

The region actively works together through a range of forums, planning processes, partnerships and projects to plan, coordinate and invest in the well-being of our communities. This includes:

- housing and growth,
- economic development,
- delivery of social and health services,
- transport,
- emergency management and resilience,
- climate change response,
- waste minimisation and management, and
- delivery of water services.

5. Challenges and change for local government

There are challenges to working collectively as a region, in part due to the disjointed nature of local government boundaries and different interests and pressures each council must manage. This has been the subject of several reviews and processes to consider council amalgamation at both a regional and provincial level.

Local government is under considerable pressure to address current issues as well as the complex and evolving challenges ahead, including those driven by a range of legislative changes. Proposed legislative change in relation to water services has the potential to fundamentally shift the scale, role and relationship between councils and communities in relation to water services. A significant contributing factor to these challenges is the funding model for local government.

"The financing of local government is a major barrier, local government needs a much-improved system of funding. In addition to an inefficient financing system, the pressures of inflation, increasing cost of living, skills shortages and climate change add to the challenge of funding for growth and delivering community aspirations." – Upper Hutt City Council¹⁰

⁶ <u>https://wrlc.org.nz/reports/housing-data</u> estimated 2024 population including Horowhenua.

⁷ https://wrlc.org.nz/reports/housing-data.

⁸ New Zealand GDP per Capita: Wellington | Economic Indicators | CEIC (ceicdata.com). Does not include Horowhenua.

⁹ <u>Greater Wellington — Your Region | Tō Rohe (gw.govt.nz</u>). Does not include Horowhenua.

¹⁰ Review into the Future for Local Government, He piki tūranga, he piki kotuku, pg 54. June 2023.



6. A regional approach to water services delivery planning

In anticipation of legislative requirements for councils to develop a WSDP, the councils in the Wellington Region and Horowhenua District earlier this year agreed to work together to consider a joint approach towards development of a WSDP. This was formalised in May 2024 when the ten councils signed an MoU to work together on a joint regional WSDP process.

The process was deliberately started as early as possible in recognition of the tight timeframe and complexity involved in developing a joint WSDP within the 12-month period signalled under the Local Water Done Well policy and is now required under the Preliminary Arrangements Act.

The councils made a commitment to work together through a collaborative and non-binding process. To provide direction and oversight, the ten councils set up the AOG, made up of an elected member from each council and four lwi/Māori representatives¹¹. This process is supported by a Chief Executives' steering group, a joint project team, a joint budget and an agreed project approach.

The approach has included running a series of workshops with the officers, Chief Executives and the AOG to consider options and alternatives, providing feedback and direction to guide the development of this process and this report. The key deliverable from this joint process is intended to eventually be a joint WSDP, including implementation plan for a future delivery model. The AOG is chaired by Dame Kerry Prendergast and members are listed in Table 3 below.

Council/Organisation	Benresentative
Chair	Dame Kerry Prendergast
Greater Wellington Regional Council	Cr Ros Connolly
Upper Hutt City Council	Mayor Wayne Guppy
Hutt City Council	Mayor Campbell Barry
Porirua City Council	Mayor Anita Baker
Wellington City Council	Mayor Tory Whanau
South Wairarapa District Council	Cr Colin Olds
Carterton District Council	Mayor Ron Mark
Masterton District Council	Cr David Holmes
Kāpiti Coast District Council	Mayor Janet Holborow
Horowhenua District Council	Mayor Bernie Wanden
lwi/Māori representative Porirua/Kāpiti	Helmut Modlik, Tumu Whakarae – CEO, Te Rūnanga o Ngāti Toa
lwi/Māori representative Te Awa Kairangi/Poneke	Kara Puketapu-Dentice – Chief Executive of Taranaki Whānui ki te Upoko o Te Ika
lwi/Māori representative Wairarapa	Jo Hayes – Trustee of Rangitāne Tū Mai Rā Trust
lwi/Māori representative/Horowhenua	Di Rump – Chief Executive at Muaūpoko Tribal Authority

Table 3: Membership of the Advisory Oversight Group

The process does not transfer any formal decision-making responsibilities or delegations from any council. Decisions on the WSDP, preferred models or commitments to future change remain with each council. There are points in the process where councils will need to reconfirm their

¹¹ Note, the lwi/Māori representatives were progressively confirmed and joined the AOG during this process.



commitment to remaining part of the collective. Any council may choose to leave this collective at any point.

The AOG has met on five occasions to date to consider options and alternatives, and to provide feedback and direction for guiding the process. Workshops have included:

- Workshop 1: 10 May 2024 MoU, membership, process, key requirements for success.
- Workshop 2: 21 June 2024 network economics, funding and financing.
- Workshop 3: 5 July 2024 governance and structure options.
- Workshop 4: 9 August 2024 concept model, funding and pricing pathways.
- Workshop 5: 10 September 2024 council positions, draft report and transitional issues.

Further meetings for the AOG are planned for the remainder of 2024. Next steps in the process are set out in Section 43 of this report.

Scale of the WSDP challenge

The issues considered in relation to a WSDP for the region are significant, requiring investment planning for billions of dollars of investment in water assets and operations. Implementation planning will consider the potential establishment of a large full-service, multi-council-owned WSCCO, which would be entrusted with the stewardship of critical regional assets with a replacement value of about \$19.7 billion. This will also have a significant impact on councils including future role, operating model, financial arrangements and scale.

Development of a joint WSDP will be a challenging, complex and highly political process in the context of evolving legislation. Additional challenge will come from the need to work across multiple councils, lwi/Māori partners, and central government, including statutory consultation with the public and input from other stakeholders.

7. What is important for our region

Under the MoU, it was agreed that any future model options need to respond to agreed objectives and consider approaches that are workable, affordable, sustainable and meet the needs of communities and the environment.

Critical success factors included that the plan and any future delivery model would:

- be supported by all participating councils and Iwi/Māori partners,
- be supported by the Government policy and enabled through legislative change,
- be based on a sustainable funding model, and
- enable councils and Government to commit to subsequent phases of detailed design, delivery and implementation.

Building on these factors, the regional WSDP process has progressively tested and confirmed a goal, and a set of key requirements based on the needs of different interest groups and organisations¹². These are summarised in Table 4 below and the detailed requirements are provided in Appendix B.

¹² It is recognised that the categorisation used here of different organisations and groups is subjective and that some requirements relate to multiple groups (for example, water is a taonga for all, not just for lwi/Māori).

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model 23

The goal identified by the AOG is to ensure the delivery of safe, reliable, environmentally and financially sustainable water services so the region can be resilient, restore Te Mana o te Wai and enable new homes and the wellbeing of communities.

Stakeholder	What they need		
Consumers	Water services must be:		
	• in public ownership.		
	affordable with fair, equitable and transparent pricing.		
	high-quality, seamless, environmentally compliant services.		
	customer focused.		
	continuously improved.		
lwi/Māori	Water services must:		
	• be treated as a taonga.		
	• have an aspirational vision to restore and protect Te Mana o te Wai.		
	lwi/Māori should:		
	 have meaningful influence with a skills-based Board where Treaty and cultural awareness are two key skills required. 		
	Iwi/Māori are looking for:		
	 a genuine commitment to local and Māori procurement. a major and fast revival of our waterways, well-being and people. 		
Councils	Councils require:		
	• financially sustainable water services with the debt from water services assessed separately to parent councils' business by the LGFA, subject to a guarantee from owning councils, the WSCCO meeting prudent lending criteria and having the characteristics of an investment-grade utility provider over the medium term ¹³ .		
	local influence to ensure alignment of outcomes, particularly for supporting housing growth.		
	• single point of accountability for service delivery.		
	• assurance that the water delivery entity has strong processes, high-quality systems and core data.		
	a long-term planning horizon.		
	economies of scale and integration.		
	• residual council financial sustainability (see more below).		
Central Government	 Water services must be financially independent and sustainable. be compliant with regulation. allow for housing growth. 		

Table 4: Requirements for regional WSDP process and WSCCO

¹³ Note this has been updated in line with Government policy announcements on LGFA lending and was previously: "balance sheet separation – so water services' revenue, costs, asset ownership and debt are recognised on the new water service entity's balance sheet and separated from councils' balance sheets as far as reasonably possible"

Future water entity	A future water entity needs:		
	 to be empowered to operate independently with freedom to prioritise investments. 		
	• to have an independent professional skills-based Board and an exceptional executive leadership team.		
	• certainty to plan, fund and invest optimally with confidence that it has committed access to long-term funding at a reasonable cost.		
	• to be a full-breadth, integrated utility, that owns assets, bills revenue and raises own debt.		
	• high-quality systems and staff, as the new regulatory environment requires a quantum shift in the data collection, analysis and reporting capabilities of all water delivery services.		

These critical requirements provide the basis for consideration and testing of a joint WSDP and the design of a potential water delivery model. During the process, options were tested regarding entity structure, governance, infrastructure strategy, price and debt funding.

A suite of transition requirements will also need to be met to achieve a smooth and seamless transition, including an equitable allocation of revenue and debt, as well as sound asset and contract transfer rules. These are detailed in Section 42 of this report: *Key Transition Principles*.

8. The role of Greater Wellington Regional Council

GWRC has a unique role as a regional council in New Zealand as it is responsible for collecting, treating and distributing safe and healthy drinking water to Wellington, Hutt, Upper Hutt and Porirua City Councils.

This work is carried out for GWRC by WWL. City and district councils are responsible for the distribution of water to households and businesses through their own networks¹⁴.

This unique role is recognised under legislation through the Wellington Regional Water Board Act 1972. Under this Act, GWRC which has a role in bulk water supply in the Wellington Region, does not need to prepare its own WSDP, but may be involved in developing a joint WSDP. GWRC has committed to this process but also noted that their intent is to focus on their resource management regulatory role and in time may plan to exit from asset ownership and associated accountabilities related to bulk water supply on the understanding that¹⁵:

- they will retain ownership of water catchment land at Kaitoke and Wainuiomata to support broader outcomes including biodiversity, recreation and climate change mitigation and adaption.
- any new entity has the structural and operational factors needed for success.

"We believe that the region can agree on a new model that will provide better water services for Wellingtonians. However, we will require evidence that a new model will provide for better and more sustainable asset management before considering the transfer of our assets."¹⁶ Daran Ponter, Chair GWRC

¹⁴ GRWC LTP 2024-2034.

¹⁵ Letter from Chair of GWRC Daran Ponter to the Chair of the AOG dated 7 May 2024.

¹⁶ Letter from Chair of GWRC Daran Ponter to the Chair of the AOG dated 7 May 2024.



9. Engagement and consultation

To date, there has been no formal engagement or consultation on this report with other stakeholders or the public. The views of communities and Iwi/Māori have been represented by AOG members and council officers. This report is intended to support a process of engagement and formal consultation from late 2024 and into 2025, as councils consider service delivery options as part of the development of a WSDP in line with the requirements of legislation.



Current state of the network and case for change

Section summary

Councils in the Wellington Region face stark challenges to meet the investment needed for drinking water, wastewater and stormwater services and infrastructure. It is clear that transformational reform is required in water services for most councils, with significant and sustained investment over the coming decades to fix, maintain and improve the network - which is at risk of critical failure in some areas – as well as to enable growth, provide safe drinking water, improve environmental water quality, and enhance resilience. The issues are urgent and will also take sustained effort to address.

This section analyses the current state of the water services network based on best available information and varies from council to council. Key regional challenges include significant network failure and deterioration, risk of network fault runaway, constraints to growth and housing, more stringent regulatory standards and compliance requirements, as well as building seismic, network and climate resilience. Work is needed on wastewater, stormwater and drinking water supply to meet climate change and population growth. Some of the other system issues are lack of scale, workforce skills and capacity, and funding. There are also concerns regarding low revenue for water relative to actual costs, household affordability, risk management, and insurance.

While not all councils have the same issues, all councils in the region have major challenges to address. About 45% of all drinking water in the metropolitan area of Wellington is lost to leaks. Across the region, about 21% of the total three water pipe infrastructure has been assessed as worn out. Wastewater is in the worst condition with about 33% of the pipes worn out. Meanwhile, many wastewater treatment plants are failing to meet compliance requirements and need large-scale replacement or investment, with immediate risks of structural failure of some wastewater interceptor pipes.

A description of current levels of service and delivery models is set out in this section of the report. There are challenges with current delivery models with compliance issues and growth not being well managed.

While councils are planning significant investment to manage these risks, combined LTP investment over the next ten years is about \$4.82 billion (real), which is approximately \$470 million (or about 10%) less than the estimated investment required based on the recommended investment strategy in this report over the next 10 years and 30-40% less than what will be required, on average over the next 20-25 years.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

27



10. An agreed need for change

Much of New Zealand has significantly underinvested in water infrastructure and water services over several decades. Councils around the country and in the Wellington Region now face stark challenges to meet the investment needed for drinking water, wastewater, and stormwater infrastructure.

This is not a new issue. The need to change how water services are funded and delivered has been the subject of several major reviews, policy processes and legislative reform. In 2000, the Parliamentary Commissioner for the Environment concluded the existing model for water services had reached the end of its design life, and this is even more the case in 2024¹⁷. Two more recent major reviews (the Havelock North Drinking Water Inquiry 2016-2017, and the Three Waters Review 2017-2019), both concluded that councils were struggling to maintain their ageing water infrastructure.

The 2020 Wellington City Council Mayoral Taskforce declared that "*tinkering is not going to cut it. Transformational reform is required.*"

While there may be disagreement on exactly how much investment is required, or how this is best resolved, there is compelling evidence¹⁸ and political alignment that there is a significant infrastructure investment deficit for three waters and change is urgently required.

Significant and sustained investment in water services and infrastructure is required over the coming decades to fix the network – which is at risk of critical failure in places – as well as to enable growth, provide safe drinking water, improve environmental water quality, and enhance resilience to potential future seismic and climate change events.

While some parts of the network are in much better condition currently (in particular in Kāpiti Coast District Council), these will require a significant increase in planned renewals to avoid the risks being faced in older parts of the network. To address these issues, an estimated \$15-\$17 billion of investment in the water network will be required over the next 20-25 years.

This level of investment is not possible for local government under current borrowing settings. In the current context, the steep increase in rates or water charges, will be unaffordable for communities. A sustained investment will also be very challenging in relation to sector capacity. There will be a need to work closely with contractors and suppliers to grow the workforce, explore new delivery models and find new and lower-cost solutions.

¹⁷ Water NZ "How councils can steer clear of troubled waters".

¹⁸ Water Industry Commission for Scotland, 2021; Beca DIA Three Waters Reform WIS modelling review, 2021.



"The current funding and financing approach is not sustainable in the context of complex wellbeing challenges and increasing community expectations.

Numerous previous reviews of local government funding have highlighted the problems and recommended changes to the system to ensure that councils can more sustainably fund their activities (NZPC 2019). However, central government has failed to enact these recommendations and the issues are compounding.

The Panel recommends some significant changes to the local government funding and finance system that will coincide with the new system of local government. This time, change must happen. Without it, local communities and future generations will be the ones missing out."¹⁹

Review into the Future for Local Government, He piki tūranga, he piki kotuku

It is accepted that the region's population ultimately needs to be able to sustain the cost of delivering high-quality water services. This issue is urgent and any delay to new solutions will push a bow wave of costs and investment forwards into the future and risk council and communities' ability to ensure clean and safe water.

11. Summary of key regional challenges

Every day, millions of litres of safe drinking water are delivered to homes across the region and millions of litres of wastewater are safety treated and discharged. This relies on the hard work and dedication of more than 1,000 local people that work directly on three waters networks for councils, WWL and a range of partners, contractors and suppliers. Their day-to-day mahi and commitment to water services on behalf of the people in the region should be recognised and celebrated.

However, the Wellington Region has a significant backlog of investment needed in three waters infrastructure and an increasing number of faults and network failures. The worn-out state of the network poses significant risk of increasing major service failures.

Critical risks include:

Significant network failure: Investment is needed to replace an ageing and failing network, including addressing the impacts of failing asbestos pipes. Currently about 21% of the network is worn out leading to an increased risk of major failure. This includes more than 1,300 kilometres of asbestos concrete pipes²⁰. About \$4.2 billion of investment is needed to replace the worn-out parts of the network. This equates to about \$200 million per annum for the next 20–25 years.

Network deterioration: In addition to replacing the most worn-out parts of the network, to avoid further deterioration and increased costs of reactive 'fixes', ongoing investment of about \$250 million per annum is needed to maintain the network as an ongoing cost every year.

Risk of network fault runaway: This can occur in any network where the fault rate generated by failing assets exceeds the operational capacity to fix them. This issue is starting to be seen across the metropolitan area of Wellington in relation to water leaks. The short-term effect is that there is always a growing backlog of outstanding faults. This typically cannot be remedied

29

¹⁹ <u>He piki tūranga, he piki kōtuku – The future for local government (dia.govt.nz)</u>, 2023 page 54.

²⁰ Based on WWL information there are 1,392kms of AC pipes for all three waters (not including KCDC, CDC, MDC, or HDC).

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



without shutting down and renewing the part of the network affected. The longer-term effect is the diversion of resources and funding away from keeping the rest of the network operational.

Constraints to growth and housing: Funding and capacity for three waters infrastructure is a key constraint for greenfield and brownfield development and is already stopping some development occurring. An estimated additional 200,000 residents will live in the Wellington Region and Horowhenua by 2053, requiring about 99,000 new homes. While growth needs to pay for growth, challenges include current capacity constraints and financing infrastructure ahead of the recovery of costs.

New regulatory standards and compliance requirements: A new, more stringent regulatory environment for water services has been introduced which will require significant investment in plant, equipment, information systems and new, specialist skill sets to ensure clean and safe drinking water and improve environmental impacts of stormwater and wastewater. Currently three of the four major wastewater treatment plants in the metropolitan area are non-compliant and investment is required to ensure sufficient clean and safe drinking water and improve water quality. Further investment will also be required to meet economic regulations and focus on quality and price.

Seismic resilience: The entire region is highly sensitive to seismic activity and the 2016 Kaikōura earthquake clearly had a significant impact on the region's buildings and water infrastructure. The earthquake revealed weaknesses in the ageing network and significantly accelerated leaks with an urgent need to replace large areas of the failing water reticulation network. Serious seismic risk exposures remain for all water networks, particularly for the main trunk water supply network to Wellington running the length of the Hutt Valley beside State Highway 2.

Network resilience and redundancy: There are critical risks of summer water shortages in the metropolitan area and wastewater pipe failures. The network also has low levels of inherent resilience, particularly in storage, with a high risk of water shortages due to the current layout of water reservoirs and lack of network cross connections. For example, if the drinking water connections from the Hutt Valley to Porirua City fail, the city would only have two to three days of drinking water capacity. WWL estimates that in the event of a strong earthquake in the Wellington Region, some suburbs could be without water for 100 days and possibly longer²¹.

Climate change: The biggest risks driven by climate change are increasing severe weather events and coastal inundation and drainage. This risk is shared across the region but is particularly severe for the western lowlands of Horowhenua, Kāpiti, and coastal areas of Porirua City and Hutt City. Some parts of the region such as Wairarapa are expected to experience drier weather leading to less availability of drinking water. Metropolitan issues are also growing, as both parts of the lower Hutt Valley and Wellington CBD lie close to Wellington Harbour and are slowly subsiding, relative to average tides. In Hutt City, the wastewater treatment plant at Seaview faces the combined effects of sea level rise and flooding risk from the Hutt River. The iron trunk network in the Wellington CBD, which is already past End of Service Life²² (EoSL), is experiencing accelerated corrosion due to the ingress of saltwater from higher tides.

Wastewater: Significant and increasing inflow and infiltration into the network is resulting in more wet weather overflows from the network and treatment facilities in Wellington and the Hutt Valley. Compounded by increasing equipment failures, this reduces the ability to manage increasing loads. Treatment plants in Porirua and South Wairarapa are also reaching capacity and equipment failure risks are growing, limiting their ability to manage bigger flows. Treatment plants in Kāpiti will face challenges in consenting for discharges to meet growth. In some cases worn-out pipes are causing sea water to be ingested into the wastewater system and fed into

²¹ https://www.wellingtonwater.co.nz/resources/topic/emergency-water-3/.

²² The economic definition for 'End of Service Life' (EoSL) for an asset is when the "expected forward risk cost of asset failure exceeds the replacement cost of the asset". This means that it is more expensive to leave the asset in the network than it is to replace it. It does not necessarily mean that the asset has failed, although typically it means the asset is likely to fail.



wastewater treatment plants. This is exacerbated by the increased production of hydrogen sulfide, which is corrosive to both wastewater pipes and wastewater treatment plants.

Stormwater: More frequent and larger flooding events are expected due to climate change and urban densification. As community expectations rise, a significant increase in the need for flood mitigation initiatives is anticipated. Stormwater quality treatment and restoration of our waterbodies is also going to become increasingly important. This is already becoming evident as comprehensive consents in the Wellington Region are lodged. The stormwater system is incomplete within the Wellington Region and in some places has cross connections with the wastewater system. During high rain events, these cross connections can cause the wastewater network to overflow, spilling untreated wastewater into the environment.

Poor reliability of water supply services is challenged by worn-out pipe failures, limited storage, and limited water supply availability. This is exacerbated by nearly half of the drinking water supply being lost through leaks in the metropolitan area.

Other key water network challenges the Wellington Region needs to address include:

Lack of scale: The size and disjointed nature of councils constrain opportunities for efficiency, strategic investment and the ability to meet local challenges. It also makes it more challenging to invest in joint solutions, such as for wastewater treatment.

Workforce, skills and capacity: The capacity and capability of the water sector will need to be progressively increased to deliver on the investment needed. All councils and WWL advise that it is challenging to recruit and retain high-quality staff into the water services workforce. Reasons include lack of career paths, lack of training programmes, and better conditions in some water consulting firms. The risk is particularly acute for smaller councils that do not have the team depth to provide back-up for key skill sets or ensure cover for emergency events. New and different skills and experience will also be required to respond to economic regulation as this is phased in.

Funding and financing challenges: Councils have a diverse mix of funding challenges. Some councils are constrained in how much they can borrow, most are sensitive to affordability and face significant trade-offs with other activities or capital programs that need to be delivered. Funding for the sector is largely provided by the LGFA, at very favourable interest rates. With significant capital programmes the main constraint is in funding headroom (with flow-on challenges in serviceability). This constraint is also influenced strongly by credit ratings. It should be noted that an underpricing of water services and an overreliance on debt funding lies at the root of the funding challenge.

Low revenue for water relative to cost: Revenue from water users is significantly below what is required to fix and sustain the network, constraining both investment and borrowing. The average cost per household for three water services in the Wellington Region is about \$140/month²³ relative to about \$250/month for average power costs.

Household affordability: Monitoring affordability constraints on households is a key requirement with rising costs of living placing a strain on many households. This constraint will remain, with pressure on households only likely to grow where water revenue is funded by council rates.

²³ Note these figures are based on 2024 average rating costs for water at \$1,711/household.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model 31



Risk management and insurance: Insurance costs and the assumed reinstatement costs have escalated significantly in recent years. This is making it challenging for councils to ensure risks are adequately managed including sufficient insurance of three water assets.

Network Failure Case Study: Dixon St Adit Tunnel, Wellington City

Failures of water infrastructure can be sudden with severe impacts, as seen in the collapse of the Dixon St adit tunnel (wastewater connector) in Wellington in late 2019.

A targeted focus on improving health and safety has led to more costs and difficulties in inspecting large, buried water pipelines and tunnels. This has sometimes led to challenges in adequately understanding the condition of these extensive critical assets, says Wellington City Council Chief Infrastructure Officer Siobhan Procter.

Although earlier inspections of the central city Dixon Street adit tunnel had noted significant deterioration, the problem areas were unable to be readily accessed. Later inspections were less detailed because of the increased difficulties and costs. As a result, the tunnel discharging into the main wastewater interceptor was not identified as being at risk of failure. Without warning, the adit tunnel collapsed in the week before Christmas 2019, leading to a significant cavity in the carriageway, potentially threatening the stability of nearby structures and health and safety in the vicinity of Dixon Street and Willis Street.

Upstream pumping stations were temporarily turned off to divert wastewater away from the collapse, while immediate repair work took place. Emergency actions were also taken to minimise the overflows, which were directed to the stormwater overflow system and then into the harbour. However, approximately 6,500m³ of untreated wastewater was discharged over about 46 hours.

"Financial consequences of the unexpected failure far exceeded the cost of planned inspections of the adit with any subsequent rehabilitation or upgrade work prior to failure," says Siobhan. Costs included those associated with the cleanup and provision of temporary solutions, investigations and monitoring, communications, delivery of the permanent solution in an urgent reactive manner, as well as third party loss of revenue and the risk of possible legal action. In addition to these financial consequences, there were significant:

- health and safety risks associated with both the untreated wastewater discharges as well as the road collapse,
- third party loss and significant disruption caused from closure, odour and construction activity,
- environmental risks and cultural offence to lwi from discharge of untreated wastewater into the harbour, and
- council reputational damage.

"This incident showed that the huge impacts from unexpected failures dwarf those of planned works," says Siobhan. "Out of sight should not mean out of mind."

12. Summary of key issues by council

While not all councils have the same issues, all councils in the region have major challenges to address including debt constraints, network condition, resilience, climate change, compliance and growth. Some councils have immediate challenges; others have challenges to come over the coming decades.

A more detailed outline of the network and key challenges for each council, including network condition, is set out in the council profiles in Appendix D²⁴.

²⁴ At time of writing, no information on key challenges had been received from Carterton District Council.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



Table 5: Key challenges for each council

Council	Key issues
Horowhenua District Council	 Ageing infrastructure such as the Levin Wastewater Treatment Plant. Securing sustainable sources of water supply for growth, especially in Levin. Infrastructure capacity to meet future population growth demand. Increased severe weather events and stormwater impacts on wastewater and stormwater infrastructure. Restoring the mauri of the water at Lake Horowhenua (Punahau) as this is a culturally significant and community asset.
Kāpiti Coast District Council	 Infrastructure capacity to meet future population growth demand. Providing water supply network to unserved rural areas. Water supply compliance to meet regulatory requirements. Resource consents for wastewater treatment plants and proposed upgrades to meet future consent requirements. Address flood hazards identified in 30% of urban properties. Stormwater pipe network under capacity (50%) for one in 10-year event. Organisational capacity and systems to meet future regulatory regime demands.
Porirua City Council	 Significant and growing renewals backlog in water and wastewater due to age profile of pipe materials. The speed of population growth is ahead of current water infrastructure capacity. High per capita water demand is outstripping supply due to water loss in the network and growth. The condition of reservoirs makes them vulnerable to contamination. The council is reliant on landfills accepting sludge from wastewater treatment plants which constrains ability to minimise waste. Streams, rivers and harbours contain coliforms and other contaminants such as heavy metals and microplastics.
Wellington City Council	 Significant and growing renewals backlog in water and wastewater due to age profile of pipes. Infrastructure capacity to meet future population growth demand. High per capita water supply demand is outstripping supply due to water loss in the network and growth. Water reservoirs conditions vulnerable to contamination. Moa Point Wastewater Treatment Plant condition is resulting in ongoing compliance issues. Karori Wastewater Treatment Plant outfall compliance issue. Streams, rivers and harbours contain coliforms.
Hutt City Council	 Ageing water infrastructure and pipes that are failing and requiring urgent investment, i.e. 109km of water supply galvanised pipes. Investing in finding and fixing leaks and managing water loss to avoid water shortages.



	Infrastructure capacity to meet future population growth demand.
	 High per capita water supply demand is outstripping supply due to water loss in the network and growth.
	Reservoir conditions mean they are vulnerable to contamination.
	 Wastewater investment is well short of what is required to renew ageing parts of the network (estimated only 10% of what is required).
	 Issues with compliance and ageing parts at the Seaview Wastewater Treatment Plant, i.e. sludge dryer.
	Streams, rivers and harbours contain coliforms.
	 A significant increase in the value of water assets is expected this year resulting in significant increases in depreciation which are currently unfunded.
	 Market capacity issues regionally to undertake the level of renewals required.
Upper Hutt City Council	Significant and growing renewals backlog in water and wastewater.
	 New environmental quality standards require very high investment to achieve wastewater and stormwater consent compliance.
	 Population growth is ahead of three waters infrastructure provision. Major investment is needed, especially in the wastewater network to enable growth to occur.
	• High per capita water demand is outstripping supply due to water loss in the network and growth.
	 As a bulk water purchaser, Council is a cost and service taker with limited influence over these aspects.
	 Major shared assets need upgrades, including sludge dryer at Seaview Wastewater Treatment Plant nearing end of life.
	Network infiltration and inflows.
	Wet weather overflows.
	Contamination and overflows into waterways.
South Wairarapa District Council	 An ageing network results in asset failure and requires an increase in renewals.
	 The speed of population growth is ahead of current water infrastructure capacity.
	Emissions from three waters are not reducing.
	 Lack of redundancy in critical systems to provide safe drinking water in accordance with the Water Services Act.
	 Poor condition of assets compromising water system and wastewater resiliency.
	Inability to comply with resource consents.
	 Treatment plants lack multi-barrier protection and have significant operational and seismic resilience challenges.
	Streams and rivers contain coliforms.
	• Flooding.
	 No new wastewater connections are available in Martinborough or Greytown.



Masterton District Council	 Meeting population growth demand. Resource consent renewals. Climate change impacts. Affordability of levels of service. Network capacity. Compliance with new regulatory requirements.
GWRC	 Ageing water network that requires increased investment in renewals. The speed of population growth is ahead of current water infrastructure capacity. High per capita water demand for the metropolitan councils is outstripping supply due to water loss in the network and growth. Current demand is highlighting that GWRC may not be able to meet its duty of care obligations as an asset owner under the Water Services Act in the long term. Seismic resilience of the bulk water assets does not meet the required earthquake resiliency standard. Work is underway, but the system is not yet reliable to meet regulatory requirements for fluoride due to lack of redundant systems and asset reliability. Current demand is placing at risk the existing assets due to lack of headroom to allow major assets to be taken off-line. Significant investment is required for the Pakuratahi lakes in the near future.

13. Current state of the water services network

Current condition, lifespan, and value of the water services networks

Network asset condition (such as for a power or telecommunications network) is usually assessed at quite a granular level and is considered a core requirement for mature essential network management. For water networks, most assets are underground and not easily inspected.

The Wellington Region's asset condition assessment is less mature than it should be. Accordingly, analysis is based on sample condition assessments of network pipes available from the latest AMPs. Key sources of information regarding asset condition, and the relatively low level of confidence in this information, are noted in the appendices.

Based on available information for most parts of the Wellington Region, three waters infrastructure is considered to be in a very poor condition (relative to a sustainable network) due to underinvestment over decades, as well as failure of asbestos pipes and impacts of the Kaikōura earthquake.



Asbestos Concrete Pipes

The Wellington Region has more than 1,300 kilometres of asbestos concrete pipes. Most of these were laid in the 1950s and 1960s and are now past their EoSL. They are susceptible to sudden collapse because over time, water flow has washed out most of the asbestos fibres²⁵ which make up the inside lining of the pipe and provides them with much of their strength. The residual concrete outer layer becomes porous, brittle, and liable to collapse due to vibration and earth movement in dry periods. Pipe failures are increasing rapidly and there is a high risk of wastewater pipes that remove waste for multiple streets or parts of suburbs failing.

While there is variability across the region (in particular, the asset condition of Kāpiti Coast District Council and GWRC networks are substantively better than other councils), an estimated 21% of the total three water pipe infrastructure has been assessed as worn out. This is a serious situation. Wastewater is in the worst condition with about 33% of the pipes worn out. This is a very high level for any network.

Key metrics for the three waters network are shown in the table below.

Table 6: Pipe network

	Drinking water	Wastewater	Stormwater	Total/Average
Length of pipe network ²⁶	3,743km	3,445km	2,165km	9,353km
% in poor or very poor condition ²⁷	17%	33%	15%	21%
Estimated average life	55 years	70 years	100 years	74 years

Meanwhile most treatment plants need large-scale replacement or investment. In the short term, there are immediate risks of structural failure of some wastewater interceptor pipes.

These worn-out assets (which are past the end of their 'End of Service Life') are generating faults such as water leaks, pipe failures, major road closures, inundation of wastewater with stormwater during rain events, untreated discharges and localised flooding. These events undermine the economic efficiency of the network by placing an additional cost burden on councils and diverting funds and maintenance resources away from productive activities including preventative maintenance and asset replacement.

The only way to address the deteriorating condition of the network assets is to aggressively replace worn-out assets with new ones until the risk of further major failures becomes manageable.

²⁵ Please note that asbestos concrete pipes do not pose a threat to human health. Refer to the background document for development of WHO Guidelines for drinking-water quality: <u>https://www.who.int/publications/i/item/WHO-HEP-ECH-WSH-2021.4</u> and information is also available on the Wellington Water website: https://www.wellingtonwater.co.nz/help-desk/waterpipe-networks/.

²⁶ AECOM and Tonkin and Taylor, Initial Draft Asset Management Plan, Entity G Wellington Wairarapa Draft version 2.0 December 2023 and updates from individual councils – refer Appendix E.

²⁷ AECOM and Tonkin and Taylor, Initial Draft Asset Management Plan, Entity G Wellington Wairarapa Draft version 2.0 December 2023 and updates from individual councils – refer Appendix E.



Figures 2 and 3 below show an analysis of the problem and the gap that needs to close. The condition of the wastewater network is particularly concerning, which is a key driver for investment.



Figure 2: State of the network²⁸





²⁸ AECOM and Tonkin and Taylor, Initial Draft Asset Management Plan, Entity G Wellington Wairarapa Draft version 2.0 December 2023.



A note on network maintenance and renewal (catch up)

It is important to have a correct understanding of the terms 'maintenance' versus 'renewal' when applied to networks.

Once an asset has become worn out, it is often impractical and economically inefficient to continue to spend money maintaining it, if doing so no longer prevents its failure. Instead, it has to be replaced. This process is called 'network renewal' and is usually an ongoing process in large essential networks. Water networks need about 1/74th of the network on average replaced every year because the average maximum age of the assets – based on measuring when they wear out – is 74 years.

The key reason that large parts of our water networks are now suffering continual and increasing failures is not necessarily because the network has not been maintained properly, but because the worn-out assets have not been replaced or renewed sufficiently, due to underfunding. This has resulted in a large backlog of worn-out assets, which are now generating high volumes of network failures, including leaks.

This is also exacerbated at points in the 'lifecycle' of a city. For example, the region has a number of suburbs such as Naenae, Avalon and Taita which were developed over a short time period with all of those assets laid at around the same time and now due for renewal creating a large bulge of renewals over a relatively short time period.

These failures cannot be controlled by fixing the leaks themselves, because the underlying assets are worn out and just break again in a different place or way. The only way to fix the network, including getting rid of the leaks, is to replace or renew these assets. Funding both regular renewal (keep up) at the same time as renewing the backlog of worn-out assets (catch up) is what is driving the high cost required to fix our networks.

Other examples of the poor state of the water network

Loss of drinking water and leaks:

- About 45% of all drinking water in the metropolitan area of Wellington is lost to leaks²⁹. This equates to approximately 30 Olympic-sized swimming pools every day.
- At 30 June 2024, WWL reported 1,601 open leak jobs and had fixed 10,160 leaks over the previous 12 months³⁰. (Note: at time of writing this number has since declined, which is in line with reduced reported leaks during winter and increased council investment in leak repair).

Drinking water restrictions and drought resilience

- The metropolitan area faces ongoing severe water restrictions over summers or an acute water shortage. This includes low resilience to risk of droughts with current supply capacity only able to meet unrestricted water demand in a one in 13-year drought, as opposed to a target of one in 50 years.
- Changes in climate, water shortages during drought years and rising demand from increases in population will contribute to the network's ability to meet current and future demand.

²⁹ WWL reporting.

³⁰ WWL report to Wellington Water Committee 26 July 2024.



Network Condition Case Study: Hutt Valley

Hutt City Council has allocated about \$1.6 billion over the next 10 years and is proposing a 16.9% increase to rates to address water issues, as well as increasing debt to \$1 billion. Hutt City Council Strategic Advisor Bruce Hodgins says "that is still far below the estimated \$2.6 billion needed for capital works. If we were to try and fund all that from rates, it would mean they would go up astronomically and unacceptably."

But the challenges cannot go unaddressed. A recent report to Hutt City Council's Audit and Risk Committee listed 23 major risks. These included an 18km sewerage pipe that could cost about \$700 million to replace, unresolved odour issues at the Seaview Treatment Plant, and the possibility of running out of drinking water.

The report noted that wastewater and stormwater network resilience, as well as drinking water network safety, was compromised due to poor condition of assets and underinvestment in maintenance and renewals. "Hutt City Council has invested a lot in water assets already, but significantly more is needed," says Bruce.

"We were told we need to renew 30km of pipe every year for the next 30 years to get on top of the issue. We're doing about half of that at the moment."

Meanwhile the wastewater treatment plant is coming to the end of its working life and requires another \$225 million in investment over the next 10 years. Locals complain about the smell and the GWRC has issued many infringement notices, and an abatement notice in response to breaches of consent conditions.

Although only about 20 years old, many critical components have deteriorated with equipment failures severely limiting the plant's ability to manage any additional flows or to realistically undertake any significant maintenance programmes. Significant renewal investment is underway to avoid further consent breaches, including an odour control upgrade, sludge dryer replacement and the UV system renewal.

"We're talking some big money that needs to be invested and it's going to be difficult," says Bruce.

"There is unanimous support around the council table for investment in water service delivery and the community also understands that assets have aged, and it is part of the life cycle of the city," he says.

"This is not something we can solve in 10 years. It will take 20 years to get to a point where we can deal with all of this under a new model."

14. Current levels of service and delivery models

The Wellington Region includes about 224,000 residential properties. Of these, an estimated 89-90% are served by a connected public water network.

Key areas that do not receive three waters services include the rural areas of the region, while some smaller towns do not have a connected piped stormwater network.

This report does not go into detail on current levels of service for water services, which is a requirement of a WSDP, but rather provides an overview of current service delivery models. Water services are provided through two main delivery models as detailed below.

water services are provided through two main delivery models as detailed

In-house service delivery models

Of the five district councils in the region, four operate in-house delivery models while South Wairarapa District Council is part of the WWL model.

Each town in these areas typically has its own, standalone water supply and wastewater networks. There are a few instances where interconnections have been built to provide a



secondary water supply as a backup to the main source of water supply (such as between Greytown and Featherston). Most of the towns are situated on flatter terrain. This makes water supply and wastewater reticulation easier but often presents greater stormwater challenges.

A brief summary of each of the in-house delivery models follows.

Horowhenua District Council

Over the last seven years, Horowhenua has run its three waters service model through the Horowhenua Alliance Agreement. In 2023, a full review of the agreement was undertaken and in May 2024, the Council approved the three waters service model be returned in house, effective from 6 November 2024.

The current Horowhenua Alliance Model employs 26 staff dedicated to operation and maintenance of reticulation, waste and water treatment plants. The Council has a small three waters team of 12 staff, who oversee asset management, engineering, projects and project planning. Two staff in the finance team perform water billing, budgeting and forecasting roles.

Horowhenua's water services charges are collected primarily from targeted rates, general rates and development contributions. Currently, Horowhenua is rolling out a 24-month project to install water meters throughout the district. This project is due to be completed by December 2025 and is currently approximately 14% completed.

Masterton District Council

Masterton District Council's water service delivery is a hybrid model of in-house and outsourcing. Revenue is derived from targeted rates, general rates and development contributions. The Council plans to introduce water meter-based charges from 1 July 2025 and is developing the policy framework to support this. The majority of residential and industrial or commercial premises are currently metered. Consumption will not be fully meter-based; there will be a threshold allowance and anything over that will attract charges.

The Council contracts the maintenance of the water, stormwater, water race and wastewater reticulation networks to City Care; the operation of the two water treatment plants and four wastewater treatment plants is carried out by in-house staff. Larger water projects are awarded through a competitive tender process under the Council's procurement policy. A number of projects are managed in-house by a small project team with specialist support.

The Council has customer service staff supporting water services and a team of technical staff managing the water infrastructure. The small team includes seven staff directly operating the treatment plants, and four people responsible for the operation of the reticulation networks, managing the service contract and planning larger water projects. Compliance and asset management functions are supported in-house by staff in the Environmental Health and Asset Management teams.

Kāpiti Coast District Council

Kāpiti Coast District Council's water service delivery is currently run in-house. This includes bulk water and wastewater treatment, network maintenance and asset management of all three waters. Water services charges are collected primarily from targeted rates, general rates and development contributions. The council rolled out water metering 10 years ago and all reticulated supplies pay for water via a volumetric charge.

The Council has developed a staged 100-year water supply strategy to ensure the district's future and has implemented an active leakage control programme and volumetric consumer charging. A 2018 Auditor-General report, "Managing the supply of and demand for drinking water", showed that Kāpiti was setting a good example with its future-focused approach to supplying drinking water. Consequentially, Kāpiti has not needed to apply summer water restrictions since the last phase of measures, which included universal metering, was introduced in 2014. The district has a wide distribution of assets across four main communities serviced by a number of water and wastewater treatment plants. The completion of Transmission Gully and other recent transport network improvements have had a major impact on the rate of growth being experienced across the district.

The Council has a dedicated Project Management Office in-house which manages the larger water capital projects. Operations and maintenance works are carried out by in-house resources, but all large capital works are carried out by external contractors. The current service model runs well and meets water quality standards. However, there are significant future challenges. These are growth-related pressure, potential increased environmental compliance in the future and resourcing, both operationally and in the asset management area.

The Council has 51 FTE staff supporting water billing and customer services, operations and maintenance of water infrastructure and the planning, investment and management of water.

Carterton District Council

Carterton District Council delivers water services on a hybrid model consisting of an in-house operations team and contractors for delivering major projects and network renewals.

Water services charges are collected primarily from targeted rates and general rates. Almost all water users are on smart water meters which makes billing relatively easy.

The current model delivers a very high level of customer service that meets all regulatory requirements for water supply and wastewater treatment, including making good progress towards a long-term goal of 100% land discharge of treated effluent. All major water service issues are included in the AMP and funded through the LTP. The delivery of the AMP will ensure continued compliance with all regulatory requirements as well as catering for anticipated growth.

The council has a three waters operations and maintenance team of ten staff, two support staff, a project manager and an asset development engineer.

Wellington Water Limited model

WWL was established in September 2014 as a result of a merger between Capacity Infrastructure Services and GWRC's water supply group. WWL became jointly owned by the Hutt City, Porirua City, Upper Hutt City, Wellington City and Greater Wellington Regional Councils in 2015. South Wairarapa District Council joined as a shareholder in 2019.

WWL does not own any water infrastructure, or set policies or user charges, or control rates. These functions sit with the six shareholding councils.

The model primarily services the metropolitan city areas comprising 75% of the region's population. The services rely on integrated water supply, wastewater and stormwater networks. For example:

- Drinking water collected and treated in the Hutt Valley. Bulk water is collected and treated from the Waiwhetu Aquifier and Wainuiomata River in Lower Hutt as well as from the Hutt River in Upper Hutt.
- Wastewater from Upper Hutt is piped to and treated in Seaview (Lower Hutt).
- Wastewater from northern areas of Wellington City is piped to and treated in Titahi Bay (Porirua City).

The WWL councils have a history of working together to address the challenges of local water services. This includes forming WWL as the second largest CCO in the country. WWL currently employs close to 400 staff, although it has a total workforce capacity of about 1,000 people,

which is procured through a combination of supplier arrangements. This includes partnerships with Fulton Hogan, Veolia, and contractor and consultancy providers³¹.

WWL delivered an annual capital programme of \$329.3 million for the year ended 30 June 2024.

The WWL model has been successful in many respects and provides invaluable learnings for the region:

- Integrated network management: The collective management of the city councils' integrated three waters network has provided opportunities to benefit from a larger scope and scale.
- **Scale:** The size of the WWL model enables it to employ a depth of water expertise and capability, which would be challenging for most of the owner councils if they operated an in-house model.

The WWL model does however have significant limitations which will constrain shareholding councils to meet the challenges going forward. These include fragmented accountabilities between WWL and its shareholding councils, constrained and uneven funding across the shareholding councils and the limited investment in critical core IT systems.

Other key limitations include:

- Accountability: The dispersement of accountabilities, especially of price, revenue setting and collection, investment planning, asset ownership and borrowing have been the source of many issues. As a result, WWL has to operate more than 20 different sets of accounts, such as an opex and capex account for each council. This is very time-consuming and prevents the design and execution of an investment programme which is optimised for the network as a whole. The fragmentation also inhibits the efficient and optimal operation of many other processes, such as investment planning, governance, customer service and consistency of bylaws.
- **Systems:** WWL was established on a constrained budget. There was minimal investment in providing the essential core IT systems. More than a decade on, WWL relies on Wellington City Council's financial system, third parties' maintenance management system and has no customer management system. This creates significant operational risk, impairs the ability of WWL to be effective and efficient in its performance, provide high-quality information and implement best practice financial processes.

Key aspects of the WWL model include:

- Service provision: WWL is contracted to provide water management, operations, maintenance services, future infrastructure and investment planning, and capital programme delivery services. It operates a mixed in-house and outsourced service model.
- Asset ownership, revenue and debt funding: All the water service assets, revenues (targeted rates, metering charges, development contributions etc) and debt remain with each council. As a result, WWL must agree discrete maintenance, capital works and funding programmes separately with each council. This inhibits WWL's ability to optimise investment across the network as a whole.
- **Shareholding:** WWL is 100% council owned. The councils' shareholdings approximately reflect their funding commitments (Wellington City 40%, Hutt City 20%, GWRC 15%, Porirua City 12%, Upper Hutt City 8%, South Wairarapa District 5%). Each council has an equal number of voting shares.

42

³¹ Source WWL figures at 30 June 2024.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



- **Governance:** The key governance bodies are the (i) Shareholder Committee (Wellington Water Committee); and (ii) Board of Directors.
- Shareholder Committee: This committee comprises a representative from each council and lwi/Māori representatives. Its role includes providing strategic direction, formulating a Letter of Expectations, coordinating feedback on the annual Statement of Intent and monitoring performance.
- **Board of Directors:** The company is governed by an independent Board which is appointed by the Water Committee. The Board appoints the Chief Executive.

WWL has been the subject of several reviews over the past two years, which have highlighted limitations and areas for improvement, including the need for clearer accountabilities and evolution of the model.

WWL is responding to these issues through an 'Organisational Capability Plan³²'. This includes a range of actions in response to the findings of these reviews including improvements to accountability, assurance, financial controls, responsibility to shareholders, preparation for transition from reforms and embedding organisational values and behaviours.

WWL is also investigating the potential requirements and costs for enhanced IT systems and processes which are likely to require significant investment from shareholding councils and would need to be considered in council annual planning and budgeting processes for the 2025/26 and 2026/27 financial years.

Review	Key findings	
Inquiry into the cessation of water fluoridation by Wellington Water, Martin Jenkins, 2022	 Fluoridation was not a priority for WWL. Drinking water has been safe but not optimally fluoridated. Fluoridation was stopped to ensure the safety of the drinking water and operators, with no plan to turn it back on. There were long-standing challenges to providing fluoridation safely. There was good awareness of these issues within the organisation at operational levels, and attempts to address them, albeit slowly. There were organisational barriers to raising and addressing issues. The Board did not have the technical expertise to realise that they needed to be asking questions about fluoride in relation to oral health. Escalation and communication of the decision to stop fluoridation took too long. The prospect of reform appears to be challenging for WWL's performance. 	
Wellington Water Contract Review, FieldForce4, 2023	 Maintenance costs had increased by 71% over the last three years. This review also found that the level of reporting from WWL was insufficient for a water utility of its size. The review suggested that efficiencies could be found if there was more focus on performance measures and cost targets. The report findings included: suboptimal contract management between WWL and its contractors; failure to ensure the performance and financial risk is proportionately shared between Wellington City Council, WWL and contractors; and a finding that the WWL reporting 	

Table 7: Key findings of reviews in relation to Wellington Water Limited

³² WWL Committee report 27 September 2024.

	to the City Council fails to accurately capture and link network performance to the physical work programme and associated budgets.
Wellington Water Limited: capital programme estimating and budget systems, Roy Baker and Kevin Jenkins, 2024	 This noted the organisation was not as mature as reviewers would expect. WWL is now 10 years old, but it has not evolved in step with the evolution of its functions and as an organisation has not kept pace with increased demand. Unclear structures and accountabilities, with like functions not being grouped with like; a control environment that is loose and not fit for purpose; inadequate systems and processes; some missing competencies (including strategic leadership); underresourcing in the finance and the risk functions; and a mismatch between WWL's values and, as described, its culture.
	• A culture of not wanting to hear or present bad news. There is a tendency to want to manage bad news before informing stakeholders, and to try to shape their perceptions and reaction to the problem in order to minimise it. Although staff and middle management had formed good relationships with the shareholders, reviewers were told that WWL comes across as defensive to shareholders.
	• Problems from the 2022 fluoride review had not been addressed.
	• Issues in this review need to be addressed urgently, otherwise similar errors will happen again. The critical work to be done includes recovering the lost trust and confidence of WWL's shareholder councils. For the senior leadership, it also includes recovering some lost trust and confidence among their own people.

15. Enabling growth

This report does not go into detail on the future investment required to enable population growth and development capacity, which is a requirement of a WSDP. It focuses on demand for new housing growth and the extent to which this is currently being constrained due to a lack of capacity in existing infrastructure and little investment for new three waters infrastructure in areas that are set to intensify.

Planning for growth and housing demand

The Horowhenua-Wellington Region has been experiencing steady growth and development, with the population projected to reach more than 775,000 people by 2054. The Carterton and Masterton Districts' populations are expected to increase by more than 50%. In Wellington City the population may grow to more than 271,000.

The Wairarapa-Wellington-Horowhenua Future Development Strategy 2024–2054 (FDS),³³ sets out how the region plans to deliver well-functioning urban environments in existing and future towns and cities over the next 30 years. It proposes where to prioritise housing and business development, as well as investment in infrastructure to support this development. The strategy guides regional policy development, including Regional and District Plan changes in the future, as well as Land Transport Plans, infrastructure strategies, councils' budgets (LTPs) and other policies.³⁴

³³ 1404-GWRC-WLRC-Future-Development-STRATEGY-2024-240223-06.pdf (wrlc.org.nz).

³⁴ <u>https://wrlc.org.nz/future-development-strategy.</u>

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



The Wairarapa-Wellington-Horowhenua FDS informed by the 2023 Wellington Regional Housing and Business Capacity Assessment (HBA) Update,³⁵ projects that an additional 200,000 residents will live in the Wellington Region by 2053, requiring 99,000 more homes to be built over that period. These additional homes are expected to be built in both new greenfield locations and redeveloped brownfield locations within existing urban areas.

Constraints on growth

The regional HBA has identified that there is sufficient plan-enabled housing development capacity up until 2053 due to either plan changes, variations, or full District Plan reviews that will enable intensification as required by the National Policy Statement – Urban Development. This is currently being updated to reflect new Government policy and direction.

However, in some cases councils have identified housing capacity which does not have accompanying LTP funding for infrastructure investment to address constraints. An example is in Porirua City for the Northern Growth Area (NGA) which is considered the Wellington Region's most important greenfield housing opportunity³⁶ with capacity for 5,000-7,000 new homes. Porirua City has not included all the three waters infrastructure costs to enable development in the NGA in the 2024-2034 LTP due to affordability and balance sheet constraints.

Furthermore, in some areas, critical issues exist in allowing new water connections to reservoirs, which in metropolitan areas are nearly all in Levels of Service (LOS) deficit.

Some new wastewater connections are managing LOS by using retention tanks on private property, but the lack of monitoring and compliance could result in significant environmental and health issues as these systems fail and are not maintained.

The implementation plan for the FDS³⁷ highlights that investment in the required three waters infrastructure is unconfirmed for some key development areas including:

- Te Aro growth corridor, Johnsonville (Wellington City) three waters.
- Trentham priority development area, Upper Hutt strategic public transport corridor (Upper Hutt) potable water, wastewater and stormwater.
- Te Āhuru Mōwai (Western Porirua), Kenepuru, Northern Growth Area potable water, wastewater and stormwater.
- Hutt Central priority development area wastewater pipeline, pump station and emergency storage.
- Featherston priority development area potable water, wastewater and stormwater.
- Carterton new water supply.
- Masterton wastewater treatment upgrade.

Other examples of capacity restrictions on growth

• **Martinborough:** Significant performance and compliance issues resulted in GWRC issuing an abatement notice for the Martinborough Wastewater Treatment Plant in August 2022. The plant has also reached its design capacity as population growth and annual connections have far exceeded expectations. Due to these issues, South Wairarapa District Council is no longer issuing building consents that need new wastewater connections³⁸.

³⁵ Regional Housing & Business Development Capacity Assessment 2023 - WRLC.

³⁶ Northern-Growth-Area-Selection-Decision-Report.pdf (kaingaora.govt.nz).

³⁷ GWRC FDS Implementation Strategy June 2024.

³⁸ <u>https://swdc.govt.nz/martinborough-wwtp/</u> and https://swdc.govt.nz/greytown-wwtp/.



- **Greytown:** In June 2024, WWL advised South Wairarapa District Council that there was not enough capacity at the Greytown Wastewater Treatment Plant to allow development of a proposed 200 lot subdivision or sufficient capacity for new connections to the wastewater network in Greytown. The plant was designed to service 2,200 connections and is currently servicing 2,700 connections³⁹.
- **Growth planning:** Porirua City Council, Upper Hutt City Council, Wellington City Council and Hutt City Council are all working with WWL to understand funding and constraints of current and future growth demands.
- Water supply: The region is approaching capacity constraints to meet current water demand in the greater Wellington metropolitan area, leading to the risk of more severe water restrictions and water shortages (see case study below). This has required a comprehensive programme of demand management (education, water restrictions and planning for water meters) and asset development (treatment plant upgrades), and potential additional storage⁴⁰.

Housing demand and projected shortfall

- Besides the very significant funding constraints facing councils, sustained growth pressures are affecting the Wellington Region including a current deficit of 9,500 12,000 houses and 2,400 families on the social housing register (representing an increase of more than 1,000 families since 2019).
- For the year ended 2023, a total of 2,427 new residential dwelling consents were issued, representing a 33% decrease since the end of 2021⁴¹. Based on current residential consenting rates for the past 10 years, it is expected there will be a housing supply deficit of 21,000 houses in the next 30 years.

Funding for growth

Along with the advantages of growth for the region comes the difficulty of funding and building sufficient infrastructure and community facilities (such as reserves and community infrastructure) to service a growing community.

Much of the cost of the infrastructure for new growth is covered by developers, particularly within property boundaries or where large-scale, comprehensive greenfield development occurs. This can include local pipe networks, stormwater detention and drinking water reservoirs.

However, development also adds pressure to existing infrastructure and the wider three waters network, which requires upgrades to add capacity. This includes water supply and reservoirs (especially where these serve multiple development areas), stormwater retention and discharge, and wastewater collection and treatment. These capacity upgrades are often very expensive and need to be integrated with other planned renewals work, which can lead to complex investment planning and long lead times.

Typically, councils recover much of the cost of these upgrades through development contributions or financial contributions⁴². These range significantly across the region in terms of costs to developers. There is however often a significant timing gap between the upfront investment to enable development and receipt of revenues. For example, a major wastewater upgrade may be required to enable development which will then repay these costs over the next

³⁹ https://swdc.govt.nz/news/pause-on-new-applications-to-connect-to-greytowns-wastewater-treatment-plant/.

⁴⁰ https://www.wellingtonwater.co.nz/our-wai-can-run-dry/.

⁴¹ WRLC Housing Data.

⁴² The purpose underlying development contributions as outlined in s197AA LGA2002 "is to enable territorial authorities to recover from those persons undertaking development a fair, equitable, and proportionate portion of the total cost of capital expenditure necessary to service growth over the long term.



20 years. The gap needs to be bridged by councils using debt and this is a problem for fundingconstrained councils. Where infrastructure is not provided in a timely manner this can constrain development, as evidenced by the examples above.

Case Study: Mitigating the risk of water shortages for metropolitan areas of Wellington

GWRC owns the bulk water supply network for Wellington, Porirua, Lower Hutt and Upper Hutt. This involves large water collection areas, four water treatment plants, 15 pumping stations and more than 180kms of large-diameter pipelines.

On a typical day:

- Upper Hutt, Porirua and Wellington's northern suburbs are supplied from Kaitoke.
- Lower Hutt is supplied from Waterloo.
- Wellington's CBD, southern and eastern suburbs are supplied from a combination of Waterloo and Wainuiomata.

An important feature of the bulk water supply system is the interconnection between the two main pipelines (Kaitoke to Karori and Wainuiomata to Wellington) at Ngauranga. This interconnection provides some degree of security of water supply to the cities. This bulk water supply network is managed by WWL.

WWL plans to work with shareholding councils to reduce the rising risk of more severe water restrictions and water shortages and to reduce the impact on communities as much as possible. WWL reports that, based on planned activity and the level of investment councils can afford, removing the risk of Level 3 and 4 water restrictions is not realistic. Instead, WWL is aiming to reduce the risk of entering Level 4 water restrictions for the 2024/25 summer.

WWL's approach to this work is driven by three key outcomes: keeping the water in the pipes, reducing water demand and adding more water supply.

WWL is working on behalf of shareholding councils across a range of activities to mitigate these risks:

- **Fix the network:** continue to increase investment into finding and fixing leaks, managing water loss and replacing old infrastructure.
- Reduce demand: continue to encourage customers to reduce water use.
- Water metering: investigate and plan for water metering. All metropolitan councils have indicated they will support work towards water metering and will progress this on varying timeframes (South Wairarapa District Council already have residential meters).
- Increase supply: in the long term, there is a need to increase the amount of bulk water supplied to the Wellington, Porirua and Hutt and Upper Hutt City Councils by building two more water storage lakes. These lakes will ensure the region has sufficient water supply in the summer to meet demand in Wellington, Porirua and the Hutt Valley. WWL will develop concept designs, and work through consenting. The cost to build the lakes will be high and as a region, there is a need to first reduce the use of water by fixing leaks in the parts of the system owned by the city councils, and by reducing demand. Construction of any new water storage lakes will be subject to community consultation and resource consent approvals.⁴³

⁴³ GWRC LTP 2024-2034.



16. Compliance

New Zealand is in the early stages of implementing a system of water regulation. The Taumata Arowai – Water Service Regulator Act 2020 and the Water Services Act 2021 introduced a new regulatory environment for water services.

This is an evolving space and will require all water providers to have the capability, capacity and investment needed to meet regulatory and compliance standards.

Major changes to the compliance framework include:

- Establishment of Taumata Arowai: Taumata Arowai has established new Drinking Water Standards and is establishing Wastewater Discharge Standards. Taumata Arowai has made significant progress in developing and monitoring drinking and wastewater quality since it was established. Government announcements on 8 August 2024 signalled changes to how Taumata Arowai regulates drinking water suppliers. The changes will "...remove barriers to Taumata Arowai taking a proportionate, cost effective and efficient approach in its functions and duties.⁴⁴"
- **Tightening of environmental compliance requirements:** Direction is set by the Government via its NPS-FM, which is currently under review. GWRC implements this through changes to the Regional Policy Statement and Natural Resources Plan and ensures compliance with environmental standards, including the allocation of water supply (take) from natural sources and for wastewater/stormwater discharge requirements. Government announcements on 8 August 2024 signalled further changes including:
 - It will require Taumata Arowai to take account of the NPS-FM, and any regional plans, prepared under the Resource Management Act, that relate to freshwater, as part of the exercise of its functions, duties and powers.
 - Development of wastewater environmental performance standards that are being developed by Taumata Arowai under the Water Services Act. The legislation will be amended so there will be a single standard, rather than a minimum or maximum.
 - These amendments would be designed to ensure regional councils implement a single standard approach in resource consents and cannot exceed the standard in consenting conditions apart from on an 'exceptions' basis.
- Appointment of the Commerce Commission as the consumer protection and price/quality regulator for water delivery services (with detail and legislation to be confirmed in late 2024). More details of the economic regulatory regime will be announced later this year when Bill 3 is enacted. It is expected that the Commerce Commission will regulate the economic performance of water delivery through regulation of price and delivery service quality. Government announcements on 8 August 2024 confirmed an intent to introduce economic regulation primarily based on information disclosure with additional powers of oversight. The main purpose of this regulation will be to ensure the right level of investment to ensure good quality water services at an affordable level. This is a critical part of the new water regulatory framework and will be necessary to give communities assurance that prices set for water services are fair and reasonable.

⁴⁴ https://www.dia.govt.nz/Water-Services-Policy-Future-Delivery-System.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



Drinking water

Most water supply treatment plants in the region are compliant for safety and those that are not, have existing remediation plans. There are several exceptions to this where water take and bore reliability will require more detailed and high-priority planning. While water safety requires continued investment, this is at a much lower scale than that required for water supply capacity, both in terms of supply take and storage. A summary of key compliance issues for drinking water is included in Appendix F.

Water pipes failure and capacity

The impact of water pipe failure will be considered as part of the quality component of water delivery service price/quality regulation and monitored by the Commerce Commission. The absence of sufficient focus on this issue by councils, when compared to water quality and environment regulation, has left this as the highest risk with the largest consequential cost to society from network asset failure.

Pipes represent about 80-90% of the total asset value of the water network, depending on differing locations in the region. As noted above, asset condition information on the pipe networks is currently incomplete. Water pipe condition assessment, identification of existing or imminent pipe failure, and the subsequent replacement of these pipes is considered the highest priority for the network, with the obvious exception of maintaining safe drinking water.

Wastewater pipe capacity is currently seriously impacting growth for many councils in the region including the targeted high-growth rate expected in Porirua and Kāpiti.

Wastewater header and interceptor pipe failures have been the predominant form of major network failure over the last few years and represent one of the highest risks of major network failure.

Wastewater

Many of the wastewater treatment plants in the region are not currently compliant. There are also serious capacity risks in both forms of treatment plant which is currently limiting population growth of many cities and districts within the Wellington Region. Because capacity constraints are not regulatory in nature, this is becoming a lower priority issue. It will be necessary to unlock these capacity constraints as a remediation priority for the network. A summary of key compliance issues for the main wastewater treatment plants is set out in Appendix F.

The high proportion of worn-out assets, and limited storage and sourcing capacity of the network is expected to result in significant economic regulatory non-compliance and required improvements as part of regulation by the anticipated economic regulator. The low historical priority given to network fault rates, failures and renewal is likely the consequence of not having economic regulation for water to date.

As noted above, the network has a very high percentage of worn-out assets and these give rise to frequent failures, repair backlogs, and divert remediation and network maintenance funds to fixing leaks and trying to achieve environmental compliance. This also raises the cost of running the network due to the burden of high levels of faults.

In practice, it will not be possible to achieve sustained compliance to wastewater discharge standards with the network failures that are currently occurring and the current design of the stormwater network including cross connections. These will need to be fixed first, as no amount of treatment plant enhancement will be able to cope with these two upstream weak spots in the network.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

49



Priority must be given first to fixing the pipe networks because this will:

- reduce water supply leaks to both lower cost and retain water supply capacity for our summers, and
- allow wastewater treatment plants to operate at known peak load capacity without the significant ingestion of seawater and groundwater.

17. Current and required expenditure and funding

All councils (with the exception of South Wairarapa District Council) have recently consulted their communities and confirmed proposed three waters investment (capital and operating expenditure) for 2024-2034 through the LTP process.

While councils are planning significant investment to manage network risks, combined LTP investment over the next 10 years is about \$4.82 billion (real), which is approximately \$470 million (or about 10%) less than the estimated investment required based on the recommended investment strategy in this report over the next 10 years and 30-40% less than what will be required, on average over the next 20-25 years.

Based on the assessment of the condition of the network, as well as investment required to enable growth and meet compliance requirements, the level of funding planned under LTPs is considered below what is needed and this will lead to further network deterioration and increasing risks. This is highlighted starkly in the WWL Statement of Intent 2024 which states that *"The likely levels of funding will exacerbate the region's critical risks and create new ones"*.


Investment required versus what is affordable – increasing the risks

As part of the LTP process, WWL shareholding councils are advised on required funding by WWL. From the WWL 2024 Statement of Intent⁴⁵:

Wellington Water advised councils that regional capital investment in the order of \$10 billion is required over the next 10 years to deliver on all the region's strategic priorities. This level of investment is unaffordable and currently undeliverable.

Based on delivery to date, Wellington Water recommended that councils (excluding South Wairarapa District Council) invest \$7.6 billion in capital expenditure over the 2024-34 LTP period. This level of funding is the maximum that can be delivered in the region⁴⁶.

Some councils have invested more in water infrastructure than ever before. However, the councils have been clear to Wellington Water that \$7.6 billion is still unaffordable due to council debt headroom constraints and impact on ratepayers.

The capital investment programmes agreed by councils collectively totals \$3.6 billion, around half of what Wellington Water recommended as being deliverable. Funding is particularly constrained in the first three years of the 2024-34 LTP period.

Wellington Water recommended a regional 10-year operating expenditure budget totalling \$1.7 billion (excluding South Wairarapa District Council). Councils have provided a 10-year operating expenditure budget of approximately \$1.5 billion.

The level of funding set by councils for the 2024-34 LTP period means we cannot achieve a balanced programme that delivers on all the region's strategic priorities.

\$2.8 billion baseline programme – based on funding assumptions from councils' 21-31 LTPs, this is the basic level of capital investment to keep the lights on but won't improve the region's water assets to a sustainable and manageable level.

The likely levels of funding will exacerbate the region's critical risks and create new ones. Of particular concern is the ability to supply water to communities in the coming summers and the longer-term costs of deferring this investment now. Based on councils' proposed level of funding, there will be limited work to support population growth, renew infrastructure at a sustainable rate, improve water quality and resilience and reduce carbon emissions.

The risks below are key risks that all our councils across the region face. The likelihood of these risks occurring is dependent on the level of investment each council provides and some, therefore, will vary by council:

- Severe water restrictions or an acute water shortage in future summers.
- Continued risk to drought resilience across the region. In the Wellington metro area, the current supply capacity is only able to meet unrestricted water demand in a 1 in 13-year drought, as opposed to 1 in 50 years.
- Wastewater treatment plants are not reliable and do not comply with consent conditions with limited ability to bring the wastewater treatment plants back to compliance reliably in the next three years.
- Environmental damage and not meeting communities' and mana whenua expectations due to wastewater overflows from network and treatment plants.
- Assets fail more regularly due to lack of investment in proactive activities such as renewing and replacing assets, planned maintenance, leak detection and condition assessments.
- Customers face more disruption and longer waits for repairs on the wastewater and stormwater networks.
- Disruption and repair times on the drinking water network will initially improve but begin to worsen from July 2025.
- Additional population growth puts pressure on the capacity of the network and treatment plants, leading to impacts on customers and the environment.

⁴⁵ WWL Statement of Intent 2024 https://www.wellingtonwater.co.nz/.

 $^{^{46}}$ This is based on a 30% uplift of work year on year that plateaus at \$1b per year. WWL Statement of Intent 2024.



Planned renewals

Another example of planned investment relative to required investment is the:

- planned length of pipe replacement (renewals) relative to the length of the network, and
- average service life (how long a pipe is expected to last this is a proxy for actual asset condition information).

This table helps to illustrate how long it would take, at that rate, to replace a pipe network. For 2024/2025, the planned meters of pipe replacement for each council are shown in the table below.

Table 8: Planned pipe replacement for Wellington Water Shareholder Councils 2024/2025 financial year47

Council	Planned pipe replacement 2024/25 (km)	Total meters of pipe in network (km)	No. of years to replace pipe network at 2024/25 rate
Hutt City	4.971	1,845	371
Wellington City	0.427	2,728	6,388
Porirua City	0.200	1,065	5,325
Upper Hutt City	2.838	662	233
South Wairarapa District	0.472	209	442
GWRC	0.180	187	1,038
Total	9.088	6,696	736

⁴⁷ WWL Statement of Intent 2024 <u>https://www.wellingtonwater.co.nz/.</u>



Options and recommendations for a regional delivery model

Section summary

This section outlines the process followed and key considerations and options for a joint WSDP and high-level design for a future delivery model.

The process focused on the development of 'best for region' options. This section sets out a *recommended* delivery model which needs to be endorsed and then fully developed in subsequent phases of work as part of the decision making regarding a joint WSDP and potential establishment of a WSCCO. This will require consideration of the provisions in Bill 3 when this is introduced into Parliament (expected to be December 2024).

The councils took a collaborative approach, facilitated by a joint regional team based on a series of workshops with the officers, Chief Executives and the AOG to consider options and alternatives, provide feedback and direction. This process helped confirm the key requirements and case for change.

A range of possible different models and structures for a joint delivery model were considered, informed by current models in the region including in-house delivery models; a joint CCO service delivery only; a joint CCO full-breadth, asset-owning, a joint council-owned company (COC); a consumer trust; and a private sector option, which was not explored.

Based on the analysis of options and direction from workshops, the recommended option is for a **joint council-owned company** (that is, a full breadth water utility, owning all assets, revenues and liabilities). This would have a similar structure to a CCO but with reduced council oversight, enabling the company to have greater control and certainty over investment plans. The recommended option is consistent with the Government's policy announcements on 8 August 2024 relating to a new class of financially independent water CCOs that councils will be empowered to establish under Bill 3.

The new WSCCO model will operate in a much more regulated environment, which will provide a strong focus on assurance, quality, delivery and value for money. The primary relationship of a WSCCO will be with its customers, not its shareholders (or owners). Council direction and oversight would therefore be less than under traditional CCO models. The new entity needs the independence and accountability to deliver. A skills-based Board with a clear set of competencies is at the heart of the recommended governance model.

The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided. Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, response times, and supply. The new model needs to be able to meet these expectations.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model





18. Process to test options for a joint WSDP and joint delivery arrangements

As mentioned, the councils in the Wellington Region have agreed to work together to consider a joint approach to development of a WSDP. Dependent on decision making of councils, the key deliverable from this joint process is intended to eventually be a draft joint WSDP, including implementation plan for a delivery model.

The process for this report focused on the development of 'best for region' options and did not consider alternative council-specific or provincial options – these are being developed and evaluated in parallel to this process by councils to inform their own decision making in relation to the WSDP.

Outlined below is a recommended approach which would need to be confirmed as part of future work relating to the development and decision making of a joint WSDP and the implementation planning and establishment of a WSCCO.

The approach was informed by a series of workshops with the officers, Chief Executives and the AOG to consider options and alternatives, provide feedback and direction to guide the development of this process. The workshops were supported by analysis of information, data, options and alternatives, to support informed discussion and direction.

The key stages of the approach are set out below.

	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Workshop 5
Overall focus	Process Key requirements for success	Network economics, funding and financing	Governance and structure options	Concept model, funding and pricing pathways	Council positions, draft report and transitional issues
Summary of options and direction	Confirmation of process Key requirements Preferred type of model	Approach to network economics and scale of the challenge Level of investment required	Governance design principles and model including role of council owners, Board and Iwi/Māori	Key elements of concept model Risks and benefits of different funding and pricing pathways to achieve financial sustainability Transition principles	Council position updates Draft regional report feedback Key activity in September and October Transitional issues and alignment
Timeline	April/May 2024	June 2024	July 2024	August 2024	September 2024

Table 9: Workshops

19. Type of model

A WSDP is required to identify the likely form of any joint arrangement, including whether it is anticipated to involve water services being delivered by a joint delivery model and the proposed model or arrangements for delivering water services.

In terms of different types or structures of joint delivery models, a range of options were considered. This assessment was informed by consideration of what does or does not work well in current models across the region, including council-delivered options and through WWL. Key learnings were:



- In-house delivery models can be prone to underfunding, less commercial expertise and potential lack of role clarity.
- WWL Board's power to chart strategic direction is hindered by not owning assets or controlling funding and the WWL model has led to underfunding.
- The WWL model has a practical overlap between Committee and Board.
- Wellington Water Committee (WWC) has a strong focus on operations, relative to performance oversight.
- Shareholder representatives on the WWC can focus on local issues at the expense of a regional and network-wide focus.
- Small shareholding councils of WWL can feel their voices are not heard.
- Consumers have underpaid for the full cost of services under all models and there has been little use of all potential funding and price levers.

Key options considered and recommended model

More details on the key options can be seen in Appendix G. A range of possible structures for a joint delivery model were considered, informed by current models in the region, including:

- 1. In-house delivery models,
- 2. Joint CCO service delivery only,
- 3. Joint CCO full-breadth, asset-owning,
- 4. Joint COC (which is a slightly modified version of number 3) ⁴⁸,
- 5. Consumer trust, and
- 6. Private sector option (Note: this was not explored due to strong opposition from councils to the privatisation of water).

Recommended delivery model

Based on the analysis of options (summarised in Appendix G) and direction from workshops, the recommended delivery model is for a **joint council-owned company** (that is, a full breadth water utility, owning all assets, revenues and liabilities).

This recommended option was selected as it was the only option that met the key requirements of councils, aligned with Government policy intentions, and the anticipated requirements of the Preliminary Arrangements Act and Bill 3.

The entity would be of the type that councils will be empowered to establish under Bill 3 to be introduced in December 2024. It would have a similar structure to a CCO under the LGA, but with reduced council oversight (as provided for under Bill 3), enabling the company to have greater control and certainty over investment plans. This is one of the features necessary to enable borrowing by the new entity.

A key assumption is that Government will introduce details for a new asset-owning WSCCO through Bill 3 – in line with the announcements on 8 August 2024 – which will provide this type of organisation with the necessary purpose, powers and functions to meet the region's requirements.

The recommended model is well aligned with the guidance on delivery models announced on 8 August 2024. This includes a similar structure to the 'multi-council-owned water organisation'

⁴⁸ Since the workshops, the government has adopted the term Water Services Council-Controlled Organisation (WSCCO) in legislation to describe the new type of water services entity. This aligns with other regulations. Throughout this report therefore we also use this term as the description of the new proposed entity.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



outlined in DIA guidance including a similar governance and accountability framework. The exception to this is in relation to stormwater, as discussed below.

The announcements on 8 August also support the recommended model option in that:

- this delivery model is well aligned with the minimum requirements that will be set out in Bill 3, and
- it would meet the requirements for a 'water organisation' (which refers to separate organisations that councils may establish to provide water services), which will be necessary to ensure lending from the LGFA.

Since AOG workshops on governance arrangements, the Government has provided broad details of the governance and accountability arrangements that will apply to the new class of CCOs that will be enabled under Bill 3. The three accountability documents provided for in these announcements are a Statement of Expectations, WSS and water services annual report. The Statement of Expectations is directly comparable to the Letter of Expectations considered during the council workshops. Similarly, the proposed water services annual report is as envisaged during those workshops. The workshops anticipated a Statement of Intent which is currently the primary accountability document for CCOs established under the LGA, but it seems likely that water CCOs established under Bill 3 will have a WSS in place of a Statement of Intent.

Until Bill 3 is enacted, however, there remains some (albeit a relatively low) risk that this type of WSCCO is not fit for purpose or able to meet the region's identified key requirements. This will require ongoing engagement with the legislative process.

20. Design principles and assumptions

Informed by the policy announcements on Bill 3, a number of design principles and assumptions have been identified for the recommended model. This includes the relationship between the proposed WSCCO and the other key "players" who form part of the water service delivery ecosystem.

Key relationships

- **Councils (owners):** New council-owned WSCCO delivering three waters services across the region directly to customers. This will ensure ongoing public ownership and control. Bill 3 is likely to confirm further protections against privatisation⁴⁹. Councils will have some ability to set purpose and direction including processes to appoint and hold the Board to account through the constitution.
 - Transfer of assets and debt: Councils transfer all their water assets, liabilities and customers to create a full-breadth water utility.

- Provisions that prevent:
 - water infrastructure assets from being used as security for any purpose
 - divestment of ownership or other interest in a water service except to another local government organisation or water organisation; and
 - lose control of, sale, or other form of disposal of the significant infrastructure necessary for providing water services in its region or district, unless, in doing so, the local authority or water organisation retains its capacity to meet its obligations

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

⁴⁹ Protection against privatisation. Government announcements on 8 August confirmed that legislation will likely include the following statutory protections:

Only local authorities and/or consumer trusts will be permitted to own shares in a water organisation.

[•] Shares in water organisations cannot give any right, title or interest in the assets, security, debts, or liabilities of the entity, and would not be able to be sold or transferred.



- The existence of strong regulators and an independent Board leaves councils with a relatively light, residual oversight role. The shareholders provide a Statement of Expectations and the WSCCO Board, having considered the Statement of Expectations, prepares and adopts the WSS (after having provided shareholders with an opportunity to comment on a draft) and an annual report. See Section 21: Ownership and Governance.
- Water customers: Water consumers become customers of the WSCCO. The WSCCO provides all services directly to water customers and bills them for their water usage and services provided.
- **Iwi/Māori partners:** Embraced as partners of the WSCCO, as both parties work to achieve an aspirational vision to restore Te Mana o te Wai. See Section 21: Ownership and Governance.
- WSCCO: The WSCCO is 'non-profit making' in that it is not allowed to pay dividends but needs to generate a sufficient and fair surplus. 'Sufficient' means that the surplus revenue is sufficient to fund the renewals to maintain a high-quality water network and to operate the organisation with sufficient investment in people, systems and processes. 'Fair' means that there is good alignment between the generation that funds the cost of infrastructure and the generation that benefits from that investment.
- **Governance Board:** The WSCCO is governed by a professional, independent Board with members selected for their skill sets and experience.
- **Debt funders:** The LGFA is likely to be the WSCCO's main funder at first. Government announcements on 8 August 2024 confirmed that the LGFA would immediately be able to lend to new water organisations⁵⁰. Over the longer term, the WSCCO is likely to develop the financial strength and maturity to be investment grade in its own right.
- **Regulators wastewater quality:** Taumata Arowai sets the three waters' standards and monitors the performance of drinking water. At a local level, the regional council applies the standards and ensures compliance for discharges and bulk water takes. Additionally, regional councils are environmental regulators under the Resource Management Act.
- **Regulators economic efficiency:** The economic regulator role will be to regulate availability and quality of services, and to protect consumers' interest by ensuring that the WSCCO sets fair prices and drive cost efficiency.

The key operating relationships and design principles are shown in Figures 4 and 5 below.

⁵⁰ Defines 'water services provider' means all forms of local government provider and including councils that continue with direct (in-house) delivery as well as new water organisations. The term 'water organisation' refers only to separate organisations that councils may establish to provide water services and does not include councils with direct (in-house) delivery.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model 57



Figure 4: WSCCO operating relationships





ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024

Figure 5: WSCCO key design principles



59



21. Ownership and governance

Through the workshops, councils considered a range of options for ownership and governance of a WSCCO. These were guided by the following council requirements relating to governance and have been updated in line with the policy announcements on Bill 3:

- Public ownership no privatisation of water assets or delivery.
- Local (shareholder) influence to ensure alignment and enable broader outcomes.
- Single point of accountability for service delivery and wider clarity of role.
- An independent, professional Board appointed based on skills, with strong commercial discipline.
- Iwi/Māori input must be meaningful.
- Board to be empowered to operate independently and innovate to achieve outcomes.
- Board has certainty to plan, fund and invest (implies limit on shareholder role).
- Board adopts a long-term planning horizon.

Other key considerations were:

- The new WSCCO model will operate in a much more regulated environment economic, environmental, quality, so not the same as existing CCO models.
- Regulation provides a strong focus on quality, assurance, delivery and value for money. These also provide channels for customers.
- The need to recognise that the primary relationship of WSCCO will be with its customers, not its shareholders (owners).
- Role of shareholders will be less than under traditional CCO models with direction and oversight through Board appointments, Statement of Expectations and annual plan reporting.
- In this context, there is a need for clarity on the role and influence of shareholders and focus, such as outcomes, alignment with growth and housing.
- The new entity needs independence and accountability to deliver.
- A skills-based Board with a clear set of competencies is at the heart of the proposed governance model.

Options considered focused on the role of the Board of a WSCCO and the role of shareholders.

	Recommended option and design principles	Other options considered
Board appointment process	 Shareholder agreement covers appointment rights Appointment process should be apolitical Shareholder appoints member to appointments panel which (with Board Chair) then appoints directors by unanimous vote Appointments panel adds rigour 	 Directors appointed by unanimous shareholder committee resolution (current WWL model) Same as option above but appointment by majority vote Same board for entity establishment and BAU operation

Table 10: Appointment of the Board of Directors – recommended model and other options



	Small establishment Board can have different focus	
Board skills and membership	 Experienced professional directors given WSCCO's challenges Director skills matrix is key to having relevant skill sets and experience on Board No elected members or specific local representation on Board Key skills would include commercial, asset management, network utilities, Treaty of Waitangi, customer, and local government 	 Constitution could allow or prohibit elected members on Board Iwi/Māori representation on Board

|--|

	Recommended option and design principles	Other options considered
Shareholder role and influence	 Shareholder forum to agree Statement of expectations and comment on draft WSS Panel to appoint/remove directors Objectives in WSS to reflect entity's statutory purpose and responsibilities Bill 3 may need to provide more independence especially around WSS 	 Statement of Expectations only Statement of Expectations and power to modify WSS Individual shareholders produce Statement of Expectations and comment on draft WSS Bill 3 may provide new options to consider
Performance monitoring	 Annual report only Compliance burden on CCO needs to be managed Annual report should not duplicate plans required by regulators 	 Half yearly/quarterly reports Residual monitoring
Oversight	 Two meetings in public only, and Parts 1-6 of LGOIMA (availability of information) One additional shareholder meeting (AGM) Regulators, Auditor-General and Ombudsman will provide oversight across all areas of activity 	 All Board meetings in public Additional shareholder meetings Bill 3 will clarify oversight by Commerce Commission and Taumata Arowai.



Other feedback and future considerations

Specific matters will require further consideration in the detailed development of the recommended model, including alignment with the minimum requirements for delivery models under Bill 3⁵¹. These will need to be worked through as part of any shareholding agreement, constitution and clarification of the roles and process for appointment of the Board. Issues include:

- Details in Bill 3 this is likely to define the purpose of a new WSCCO established under that legislation and may clarify the roles of owners and Board as well as reporting requirements.
- The importance of economic regulation in a new model vital to ensure fair prices and sustainable investment. Economic regulation oversight and price change will need to be phased in over time, to ensure that there is sufficient capability for both the regulator and delivery models.
- Role and oversight from owner councils and Iwi/Māori partners:
 - There will be a transitional development of the new entity and significant compliance requirements in the first few years. There is a need to ensure the Board and WSCCO are not overloaded. Council oversight may change as regulators are established.
 - There will need to be some form of shareholder forum to set and agree direction, with a need to clarify membership or role of Iwi/Māori on this.
 - Key roles of councils include holding Board to account, alignment with growth, and equity.
 - Foundation documents will need to provide clarification on the role of councils and mana whenua in relation to Board appointments panel – membership, process, decision making; and shareholder forum – such as membership, role, key areas of focus, representation.
 - Councils will need to communicate the changes to their communities, including the shift in relationship from council-customer to WSCCO-customer, with the regulator as 'backup'.
- Board of WSCCO and entity:
 - It is important to have skilled people on the Board and get the setting right to make this attractive. Skills/competencies to be considered would include commercial, asset management, network utilities, Treaty of Waitangi, customer, local government, and local knowledge.
 - The Board needs to be professional and skills-based, not representative with appointments by panel. The appointments process will need to work through challenges and options regarding the membership of the appointments panel and decision-making requirements – such as consensus or majority, and role of lwi/Māori.
 - Unanimous decision making often does not work, and this is a learning from WWL. Particularly when appointing directors to boards, the decisions should not need unanimity.

Restrictions against privatisation.

⁵¹ Government announcements on 8 August noted councils can design own arrangements as long as these meet minimum requirements:

[•] Will have to meet clear minimum requirements set out in legislation. This includes meeting regulatory standards, financial sustainability requirements such as ringfencing of water services.

[•] Additional requirements for water organisations to ensure they are operated and governed effectively.



- \circ $\;$ There is potential for a transitional Board during the establishment period.
- There is a need to be clear on how to ensure effective day-to-day operations and in relation to a skills-based governance board.
- o The new model must not impact on Treaty settlements.
- Following a concern that smaller councils may not get same priority as bigger councils, there should be a focus on a baseline of level of service and local delivery.

Establishment period and rights of entry and exit

A further matter for consideration in the next phase of work and the establishment documents will be rights of entry and exit as shareholders.

During the first 3–5 years of the new WSCCO it may be necessary that there is a 'lock down' period of shareholders.

This is to provide the WSCCO with sufficient certainty of accountabilities, shareholders and investment and to avoid potential significant distraction caused by shareholders joining or leaving the model while the WSCCO is developing capability.

This approach would potentially also allow for a formal review point for the WSCCO that could provide for a review of constitution, governance arrangements and shareholders.

This process would need to recognise the potential cost and resource implications for the WSCCO and shareholders of this review and for joining or leaving.

GWRC has indicated a preference to focus on their resource management regulatory role and in time may plan to exit from asset ownership and associated accountabilities related to bulk water supply.

22. Treaty obligations, principles and partnership

Two of the key design principles are to ensure that:

- 1. Iwi/Māori have meaningful influence and
- 2. Treaty of Waitangi obligations are honoured.

The role of Iwi/Māori in relation to the governance of a WSCCO is discussed above and will need to be confirmed through any foundational documents such as the constitution, shareholders' agreement and role of the Board appointment panel. This includes a potential role as part of a shareholder forum and Board appointments. The Board would also need to have suitable competencies and skills in relation to the Treaty of Waitangi.

The new WSCCO will need strong relationships with lwi/Māori in operations and delivery. There is an opportunity to learn from the Watercare model, which has enduring MoU arrangements that set durable and long-term arrangements which go beyond the transactional.

This will need to be confirmed through the development of the WSDP to ensure that the organisational design has clear, designated roles to partner with Iwi and to give effect to any Treaty settlement obligations which transfer across from the councils.



Watercare model and partnership with lwi/Māori

Watercare is the CCO, 100% owned by Auckland Council, that provides water supply and wastewater services in Auckland. As well as being a CCO, Watercare is an "Auckland Water Organisation (AWO)" as defined in the Local Government (Auckland Council) Act 2009 (LGACA), and as an AWO is given various rights and obligations under Part 5 of that Act.

The LGACA does not require that the Watercare Board has any particular level of mana whenua representation on it. Instead, Auckland Council appoints the directors of the Watercare Board in the normal way, and subject to ordinary LGA requirements.

These include section 57(3) of the LGA, which states that when identifying the skills, knowledge and experience required of directors of a CCO, the local authority must consider whether knowledge of tikanga Māori may be relevant to the governance of that CCO.

Auckland Council has an Appointments and Remuneration Policy for Board members of Council Organisations. One of the core competencies the Council requires on the boards of its substantive CCOs, including Watercare, is: uphold the principles of the Treaty of Waitangi, readiness to promote improved outcomes for Māori and knowledge of Te Ao Māori and established Māori networks.

In 2012, Watercare established the Mana Whenua Kaitiaki Forum (the Forum) to encourage discussion and guidance, and to share views on the management of water and wastewater. The Forum's focus has widened to all Watercare matters affecting the strategic interests of mana whenua across the Auckland Region. There are 19 tribal authorities represented on the Forum.

The Kaitiaki Schedule is regularly sent to the 19 tribal authorities on the Forum. It sets out Watercare's planned work programme, most of which requires resource consent. Representatives are invited to express interest in projects.

Watercare has also entered into relationship agreements with various lwi and hapu in Tāmaki Makaurau (Auckland) and beyond. These include kawenata with Waikato Tainui and other 'river lwi' that acknowledge the parties' respective interests, desired outcomes, and sets out how the parties will work together. Watercare also from time to time enters into agreements with lwi/Māori entities relating to specific projects.

Watercare's Board is supported by the Executive Leadership Team at Watercare, including the Tumuaki Rautaki ā-lwi me ngā Hononga (Chief, Māori Strategy and Relationships.) This officer is responsible for ensuring Watercare has the structures and resources to meet its obligations under Te Tiriti o Waitangi.

23. Joint arrangements and stormwater management

A WSDP must confirm the extent of any joint arrangements, including whether the joint arrangement will deliver all water services for all the territorial authorities that are parties to the joint arrangement, or other arrangements.

Through the workshops, councils considered the extent of joint arrangements and whether this would cover two or three waters. Councils have confirmed a preference for the recommended model to include all three water services. This would also mean the transfer of these assets and any relevant liabilities.

A three waters delivery model aligns with the current WWL service model for shareholding councils, and it would be challenging for councils to build or retain sufficient internal capacity for stormwater outside a separate WSCCO.

The identified exceptions to these recommended joint arrangements are:

- Non-piped stormwater networks in urban areas would remain under council ownership. It is likely that councils would enter into service level agreements to confirm management for these areas as part of an integrated approach to stormwater.
- GWRC intends to retain ownership of drinking water catchment areas in Kaitoke and Wainuiomata to support broader outcomes including ecosystems, recreation and climate change.
- Wairarapa councils intend to retain water races that service agriculture.

This recommended model may not fully align with the Government announcements on 8 August 2024 in relation to stormwater management and expected content of Bill 3. The announcements⁵² set out that:

Councils will retain legal responsibilities for the management of stormwater services, but they can choose to:

- continue to deliver stormwater services in-house and contract aspects of stormwater service delivery to a new water organisation,
- transfer aspects of stormwater service delivery (this might include stormwater network assets) to a water organisation, and
- contract aspects of stormwater service delivery to a third-party provider, via longterm contract or public-private partnership.

Councils can determine the levels of service and performance targets for the delivery of stormwater management services. Water service organisations identify the costs of delivering stormwater management services that meet the expected levels of service and meet performance targets.

Councils will continue to collect revenue through rates from residents and businesses for stormwater management services. Revenue for the delivery of stormwater management services is identified separately within council's accounts (ring fenced). Depending on the stormwater management services that are contracted or transferred, the revenue collected through rates may be allocated between councils and water service delivery vehicles to deliver stormwater service outcomes.

The key potential issue here is for conflict of accountabilities and funding under a model where councils choose to transfer delivery and assets to a WSCCO but are legally required to collect revenue (ring-fenced) and have legal responsibility for stormwater. This is particularly challenging where there are cross connections in the network between wastewater and stormwater.

The approach to stormwater is an issue that councils will need to further consider in Phase 2 of this process and may need to submit on in relation to Bill 3 including further engagement with DIA.

Separation of stormwater and clarification of optimal arrangements for the region may be complex and key aspects to work through will be:

- legislative requirements,
- network condition and investment required to deliver outcomes including improved discharge quality,
- achieving financial sustainability, including council financial positions, pricing and financing,

⁵² https://www.dia.govt.nz/Water-Services-Policy-Future-Delivery-System.



- asset ownership, debt transfer, revenue transfer,
- asset and network types and interconnections including between piped networks, overland flow paths, roading and other parts of the stormwater system,
- accountabilities and potential service delivery and resourcing options, and
- interrelationship with flood management, risks and accountabilities.

24. Customer model and local service delivery

The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided. Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, response times, and supply. The new model needs to be able to meet these expectations.

Under the recommended model, water consumers would become customers of the WSCCO. The WSCCO would provide all services directly to water customers and bill them for water usage and services provided. This would require the WSCCO to have the ability to:

- proactively communicate to customers,
- receive and respond to service requests, and advice regarding leaks on private property,
- transparently bill customers based on an agreed price basis, and
- ensure service levels are met.

As reflected in the key requirements, councils have expressed a strong view that any future regional WSCCO would need to provide a high level of local service delivery and not result in a loss of service levels for communities. Typical levels of services and performance measures include:

Compliance and quality:

- compliance for drinking water supply with Taumata Arowai drinking water quality assurance rules,
- providing an efficient and effective stormwater system to minimise the impact of heavy rainfall,
- delivering stormwater services in a manner that is acceptable, safe and, where possible, enhances the environment, such as water quality at beaches,
- number of flooding events due to stormwater overflows,
- number of complaints received about water clarity, taste, odour, pressure, flow, and continuity of supply, and
- compliance with resource consents.

Response times:

- response times to a fault or unplanned interruption to the water network,
- resident satisfaction with the water supply service they receive,
- resolution of urgent callouts,
- attendance for non-urgent callouts, and
- resolution of non-urgent callouts.

Supply:

• average drinking water consumption per resident per day,



- percentage of real water loss from networked reticulation system, and
- kilometres of renewals for three waters infrastructure.

It will be important that the organisational design and operating model for a regional WSCCO is set up to meet these expectations for local service delivery. This may draw upon the benefits of scale which provides additional capacity and capability with a local focus to ensure effective customer services, including website, channels, and call centre and quality local service delivery; including local depots for service delivery to ensure local knowledge and efficient response to service requests.

Based on the Government announcements on 8 August, it is expected a WSCCO would be required to develop and implement a WSS which will likely include elements to:

- state publicly the activities and intentions of the water services provider, and the objectives and outcomes to which those activities will contribute,
- provide transparency about the regulatory requirements and other expectations that apply to the provider (including financial sustainability), how it proposes to meet those requirements and expectations, and the associated costs and levels of investment needed, and
- provide a basis for the accountability of the provider for its performance.

25. Capability and capacity development

The intended reforms represent a significant opportunity for the water industry and for local employment, and there will be a need for a national focus on capability and capacity development. Working with wider sector partners, a new WSCCO would need to have a significant focus on capability and capacity development to be able to deliver the scale of investment required, meet new regulatory requirements, service customer needs and drive efficiency gains.

While it is assumed that many of the people working in the water sector will continue to do so, this new model will also require new and different skills that are not currently part of the WWL or in-house council delivery models.

This will require a focus on:

- IT systems and processes: significant investment will be required to ensure that the WSCCO has the full end-to-end digital capability to undertake its functions effectively.
- Quality and completeness of asset data including asset condition information: greater focus on asset data, condition inspections and the management and use of this information to support effective investment decision making.
- Planning: long-term strategic network planning and investment to support financial sustainability and meet the requirements of the regulators.
- Regulation: new and enhanced capability to meet regulatory requirements, in particular for economic regulation.
- Supply chain and procurement: working with the wider sector to identify opportunities to drive efficiency and support private sector investment in new capability and capacity building.
- Training and development partnerships: working with a range of partners and stakeholders to identify and provide training and career pathways. Leveraging existing local providers where possible.
- Technology and innovation: new ways to do work more effectively, especially for pipe condition assessment and replacement work as this represents the greatest challenge.



• Customer focus and billing processes: to ensure good quality service provision, and transparent and effective service delivery.



Financial sustainability of water services

Section summary

A WSDP will need to demonstrate how financially sustainable delivery of water services will be achieved by 30 June 2028. This document does not provide this level of detail but does provide a strategic level of analysis of these matters to ensure councils to have sufficient understanding of the level of investment required and a potential pathway to financial sustainability, including opportunities to use financing arrangements to help manage cost increases.

Informed by modelling of a range of investment scenarios, the recommended investment strategy to ensure financial sustainability is based on increased debt and pricing to enable an investment programme that will **'keep up'** with network maintenance, **'catch up'** on the backlog of worn-out infrastructure, **'build up'** network capacity to enable growth and **'clean up'** wastewater and stormwater to improve discharge standards by upgrading assets as they are replaced at end-of-life.

To ensure that this strategy is affordable, careful use of long-term financing will be required to smooth and balance cost increases over time.

It is estimated that it will take about 20-25 years to replace worn-out parts of the network and ensure substantial environmental compliance. It is also possible to extend the time for this catch-up period, which may result in lower costs but is likely to result in increased risk of network failure and consequential failure and repair costs.

The actual investment and therefore financial strategy and price path will be informed by development of the WSDP and then implemented by a WSCCO. This will be done in the context of a new economic regulator that will have a strong focus on quality and price based on the actual cost to provide sustainable networks and services.

A range of scenarios has been modelled to indicate average potential price increases across the region and do not reflect the actual cost to serve a particular local area, existing prices or an agreed price transition. Under all scenarios modelled, prices will need to increase to address the backlog of investment needed. Price rises will need to be managed through the use of financing tools and effective and efficient targeting of works required. This is expected to result in a more affordable rate of increased costs to water consumers than would otherwise be possible under current local government funding arrangements.

Based on the scenarios modelled:

• Price rises could be up to 9% per annum on average across the region to address the backlog of investment in the network. This rate of price increase will need to be managed through financing arrangements and/or the level of investment undertaken.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



• The average price per connection across the region in 2024 is \$1,711⁵³. The amount that this rises to could be up to twice current prices or a peak of about \$3,000 to \$4,000. However, it may be possible to reduce this peak price through financing arrangements and a sustainable price is estimated at about \$2,596 when the catch-up phase is completed in about 20 years' time. This sustainable price is about 51% above the level of current charges, meaning that this level of increase could be gradually managed over time.

To manage affordable changes in prices, key assumptions include:

- Economic regulation will include a core principle that water prices must be based on the cost to provide services to the relevant group of customers.
- The WSCCO will need to develop and agree a pricing and revenue strategy working with the economic regulator that will balance price and quality.
- The WSCCO will use LGFA financing arrangements and additional debt headroom to manage the rate of cost increases.
- People across our region currently pay different amounts for water services depending on where they live and whether water use is metered. These existing price differentials will be locked in for a three-year transitional period to help ensure that consumers do not receive a major price shock.

26. Financial sustainability

A WSDP will need to demonstrate how financially sustainable delivery of water services will be achieved by 30 June 2028. This requires confirmation of:

- Investment sufficiency the projected level of investment is sufficient to meet levels of service, regulatory requirements and provide for growth;
- Revenue sufficiency there is sufficient revenue to cover the costs (including servicing debt) of water services delivery; and
- Financing sufficiency funding and financing arrangements are sufficient to meet investment requirements.

Further guidance has recently been provided by the DIA on how financial sustainability should be demonstrated within a WSDP⁵⁴.

This document does not provide this level of detail but does provide a strategic level of analysis of these matters to ensure councils have sufficient understanding of the level of investment required and a potential pathway to financial sustainability, including opportunities to use financing arrangements to help manage cost increases. This has been informed by a network economics approach (see Appendix H).

Further work will be undertaken to demonstrate financial sustainability in line with legislative requirements, departmental guidance and associated templates as investment scenarios are refined and the WSDP is developed. In particular, this will need to focus on financing arrangements to manage affordability and rate of cost increases. This work is expected to result in a more affordable rate of increased costs to water consumers than would otherwise be possible under current local government funding arrangements.

⁵³ Based on 2024 costs.

⁵⁴ https://www.dia.govt.nz/Water-Services-Policy-Water-Services-Delivery-Plans.

Limitations: It is important to note that this report is intended as a strategic level of analysis and investment strategy to support this phase of council decision making. This modelling is indicative only and the actual WSDP will need to demonstrate financial sustainability by 30 June 2028. The financing, pricing and investment strategy will be developed as part of the WSS by the Board of a WSCCO over some decades, with oversight from the economic and quality regulators to ensure a balance of compliance, quality and affordability.

27. Approach to modelling

This report has been informed by network economic and financial modelling to support strategic options assessment and initial consideration of financial sustainability requirements. The methodology followed is based on established best practice network economics for regulated networks (see Appendix H).

The network economic and financial modelling is multi-dimensional and can be used to test a wide range of alternative investment, price, debt and risk scenarios. These scenarios are not intended to represent planned investment or financial arrangements, but to help understand tradeoffs and potential options.

Apart from the rate of catch-up investment, the total investment required was taken as an assumed fixed quantum on the basis that it is the essential investment required to turn the network around and to meet growth and compliance standards. It is noted that this is an *estimate* only of the level of investment required and will require significant further refinement through the development of the WSDP. These estimates will continue to be reviewed and refined as part of a WSDP based on more robust bottom up analysis of the investment needed.

The variables to trade off then become a scale of capital programme (which informs the network remediation period) and the funding sources, being price and debt. In assessing financial sustainability and arriving at a recommended investment strategy, several key considerations need to be balanced including:

- addressing the critical network challenges through increased revenue from price and borrowing. The WSCCO will also need to ensure that the level of borrowing is sustainable and within covenants agreed with the LGFA,
- rates of price increase and ensuring cost increases are affordable for households. All scenarios modelled require price increases over time. Without price increases, it will not be possible to catch up and the region will face ongoing risks of significant network failure,
- balancing the risk and costs of network failures with affordability of price increases and with the level of debt that is sustainable. Taking a longer time to fix worn-out pipes will mean increased risk of critical network failures as well as carrying the faults cost burden for longer,
- financing arrangements, including how the WSCCO can utilise and structure borrowing to manage and smooth the rate of cost increases (note, only limited focus has been undertaken to date on financing opportunities and this will need to be fully explored in subsequent phases of work) and
- being deliverable based on sector capacity.

28. Scenarios

The considerations outlined above inform a two-stage logic to modelling scenario options for network remediation, price and debt. The modelled scenarios have been based on the

information, assumptions and limitations as noted in Appendix C, are intended to inform strategic trade-offs only and are not the basis for investment decisions or price pathways.

The scenarios are all modelled based on FY24 real numbers (not inflated) and all scenarios assume pricing for Years 1-3 are based on LTP investment levels and rates increases.

Consideration one - scale of capital programme and network remediation period

The amount of network to be remediated is fixed (this is estimated at ~\$4.2 billion based on 21% of the network being worn out with a total replacement value of \$19.7 billion). Remediation of the network can be practically achieved over about 20-30 years based on sector capacity.

The slower this occurs, the lower the annual capital spend required because it spreads the \$4.2 billion catch-up cost over a longer period. This means that fixing the network over a longer period may result in lower costs overall because the lower capital spend means that less borrowing is required while prices are being raised until Funds from Operations (FFO)⁵⁵ cover capital requirements.

However, the slower the network is fixed, the more investment will be required to fix faults. Also, this will lead to higher risks of both critical network failure and network fault runaway increasing, due to leaving worn-out assets in the network for longer.

These risks are assessed as already having high likelihood of occurrence with corresponding serious consequences and potentially very high associated costs which are not currently factored into the modelling. These include consequential costs from sustained or regular occurrences of lack of water supply delivery, lack of wastewater delivery and localised flooding from stormwater. Once these are factored into modelling, these may outweigh additional interest costs from lower borrowings.

Consideration two - price rise rate and debt

Until the FFO exceed capital expenditure, the balance must be borrowed in some form of debt. Use and structure of debt will be an effective way to efficiently and equitably invest in the network over time, and deliver network improvements faster.

Raising prices more quickly lowers the total debt required and reduces the overall cost to the consumer over the longer term.

Raising prices slowly is more affordable to consumers but may also raise the overall cost during network remediation due to the increased overall debt and associated interest cost burden.

Modelled scenarios

Based on the considerations above, the range of scenarios modelled include testing of the following variables (see Appendix I):

- lower and higher rates of price increases,
- slower and faster rates of network remediation,
- higher and lower construction costs,
- higher faults costs,
- higher debt, and
- investment based on LTP investment levels.

⁵⁵ Funds from operations (FFO) is the actual amount of net cash flow generated from a company's business operations. FFO Formula = Net Income + Depreciation + Amortization +/- Gains or Losses on Property Sales.

29. Investment sufficiency - Level of investment required

Requirement: the projected level of investment is sufficient to meet levels of service, regulatory requirements and provide for growth.

Informed by consideration of a range of scenarios, the recommended investment strategy to ensure investment sufficiency is to **'keep up'** with network maintenance, **'catch up'** on the backlog of worn-out infrastructure, **'build up'** network capacity to enable growth and **'clean up'** wastewater and stormwater to improve discharge standards by upgrading assets as they are replaced at end-of-life, and as much as possible separate the stormwater system from the wastewater system (so that the latter can be made discharge compliant).

It is estimated that it will take about 20-25 years to replace worn-out parts of the network and ensure substantial environmental compliance. It is also possible to extend the time for this catch-up period to around 30 years, which may result in lower costs but is likely to result in increased risk of network failure and consequential failure and repair costs.

Even with an optimised investment strategy, the costs will be substantial. It will rely on a combination of price and debt. Over the next 20-25 years, the total network investment required is estimated at about \$15-\$17 billion at an average of approximately \$700-\$750 million per annum (note this will require a gradual increase in investment to ensure market capacity to deliver).

This is based on investment sufficiency to:

1. Keep up by investing an average \$250 million per year in sustaining investment.

This is the investment required to simply maintain the network in its current state. The \$250 million is the average annual sustaining investment required for a \$19.7 billion network with an average 74-year maximum asset life and a 1.3% per annum population growth over an initial 10 years.

2. Catch up by investing an average of \$200 million per year to redress the renewal backlog over 21 years.

Based on the \$19.7 billion replacement cost, a \$4.2 billion investment is required to replace the 21% of assets which are in poor or very poor condition. The rationale for selecting a 21-year recovery period is explained below.

3. Build up capacity by investing \$150 million per year in growth.

This is the annual growth investment required to expand the capacity of the network to support the forecast population growth of 1.3% per annum. This figure has been matched to current annual capital growth costs for the region net of development contributions.

4. Clean up by investing \$90 million per year to meet drinking and wastewater quality standards.

There is huge uncertainty regarding the cost and timeframe for achieving water quality standards, particularly around wastewater. In the absence of a solid fact base, it has been assumed partial compliance can be achieved by upgrading assets when they are replaced at the end of their lives. The \$90 million per annum is a placeholder calculated at 5% of the replacement cost of the assets replaced each year. Once the network has been fixed, the remainder of the \$2 billion allocation to compliance will be spent on remaining wastewater pipes that have not yet been replaced during the catch-up period, and on treatment plant compliance.



5. Faults

The annual cost of fixing faults (including leaks) is currently estimated at more than \$41 million per annum (based on the WWL Annual Report). This cost is driven largely from the fault repair cost associated with worn-out assets in the network and will reduce over time as parts of the network are fixed resulting in an average assumed cost of \$25 million per annum over a 20-year period. If fault rates continue to increase (due to non-replacement of worn-out assets) then this cost burden will also increase. There is low confidence in this figure of \$41 million due to leaks only being classed as faults when reported by the public (in the absence of metering), increasing fault backlogs (which do not create an accounting cost until they are repaired), and underground leaks (which are often not visible), so on review this figure may need to become much larger. Nearly all faults (particularly leaks) represent capital inefficiency in the network because they occur only at low levels when the network is functioning properly.

Figure 6: Infrastructure investment strategy (figures are indicative and subject to ongoing review and validation)



This strategy renews 44% of the network, significantly reduces risk, and provides both growth capacity and compliance enhancements in the most efficient way.



Basis for catch-up timeframe

The current condition of the network, and the high risk and cost of major failures, highlight the need for early and significant network intervention, mainly in the form of asset renewals for pipes and plants.

However, the 'low' price being charged for water by councils does not currently allow the network to be sustained in its current state, let alone remediate a large portion of worn-out assets.

The recommended investment strategy is to complete the catch-up investment over about 20-25 years. This balances the cost of faults versus the cost of interest. It also results in the replacement of about 44% of network assets over this time, due to both sustainable asset renewal and catch-up renewal.

Through increased use of financing tools and debt, an alternative investment strategy would be to target a 12-15-year catch-up period. This would significantly lower the risk of network failure but is unlikely to be deliverable based on sector capacity. The alternative to this is to spread the costs over 30 years but would also have higher risk of network faults due to the extended period the network continues to be held in its current poor condition.

The cost of a failing asset

The cost of a failing asset depends on its position in the network because this impacts the consequential cost of its failure. An asset which is centrally located (upstream) in the water supply network (and downstream in wastewater and stormwater networks) is typically replaced earlier in its degradation process because its failure causes a larger impact on the delivery edge (downstream) of the network.

A typical example would be a low-cost rubber seal in a pump that supplies water to a reservoir. A failure of this seal causes a failure of the pump, which prevents the filling of the reservoir that may then run out of water for all the downstream connections. For highly critical network components, assets are replaced earlier in their degradation cycle. Conversely, even seriously failing assets on the edge of the network that impact only a few customers are often intentionally run to failure because this is still cheaper than replacing the asset earlier.

30. Revenue sufficiency - Revenue required and affordability

Requirement: there is sufficient revenue to cover the costs (including servicing debt) of water services delivery.

As noted above, the actual investment and therefore financial strategy and price path to deliver the investment strategy will be informed by development of the WSDP and then implemented by a WSCCO with oversight from the economic regulator. The revenue and price analysis below is intended to help illustrate how much could be funded based on a range of scenarios and is not intended as an accurate estimate of actual price increases or an investment strategy.

To understand potential trade-offs to deliver on the 'investment sufficiency' and also ensure affordability, a range of scenarios has been modelled. Further analysis of these will be required informed by financing arrangements (see Section 31: Financing sufficiency) to smooth and balance cost increases over time.

Delivering affordable water is a major challenge, not just in New Zealand but in most developed economies. A recent World Bank Study determined that the percentage of GDP spent on water

infrastructure by developed economies is currently 2% and needs to rise to 4%. This is consistent with the economic analysis in this report and is a material change.

Councils are keen to ensure that any future regional WSCCO will provide a high level of local service delivery, including good compliance, quality, response times, and supply while also ensuring that these services remain affordable.

The new WSCCO would provide all services directly to water customers and bill them for water usage and services provided.

Currently the full costs of delivering water services are not fully funded by the water portion of council rates, and current council LTPs do not make an allowance for full funding of water services into the coming years.

A new water company will be required by the economic regulator to fully fund the costs of water services. Because of this, the WSCCO will need to effectively use debt and households are also going to have to pay more for water than they have been.

The scenarios have been modelled to provide an indication of average potential price increases across the region. These do not reflect the actual cost to serve a particular local area, existing prices or an agreed price transition. Under all scenarios modelled, prices will need to increase to address the backlog of investment needed. Price rises will need to be managed through use of financing tools and effective and efficient targeting of the works required. Based on the scenarios modelled:

- Price rises could be up to 9% per annum on average across the region to address the backlog of investment in the network. This rate of price increase will need to be managed through financing arrangements and/or the level of investment undertaken.
- The average price per connection across the region in 2024 is \$1,711⁵⁶. The amount that this rises to could be up to twice current prices or a peak of about \$3,000 to \$4,000. However, it may be possible to reduce this peak price through financing arrangements and a sustainable price is estimated at about \$2,596 when the catch-up phase is completed in about 20 years' time. This sustainable price is about 51% above the level of current charges, meaning that this level of increase could be gradually managed over time.

Key assumptions in relation to pricing and ensuring a focus on affordability include:

Economic regulation:

- Legislation will confirm the Commerce Commission as the economic regulator. They will have a key role in customer protection and ensuring a focus on both price and quality.
- In particular, the Government has stated that the economic regulations will include a core principle that water prices must be based on the cost to serve the relevant group of customers.

Financing, pricing and revenue strategy:

- The WSCCO will use LGFA financing arrangements and additional debt headroom to manage the rate of cost increases.
- Actual price increases from about 2027 will be based on the actual investment required and an agreed pricing and revenue strategy that the WSCCO develops with the economic regulator.

Harmonisation of pricing structures, over time:

• People across our region currently pay different prices for water. This varies a lot depending on where they live and whether their water use is metered.

⁵⁶ Based on 2024 costs.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model 76



- The WSCCO will inherit a diverse suite of revenue sources and pricing structures from across the region. Given this, revenue and pricing will be very complex. For example, there are very diverse charging structures for non-residential services such as development contributions, although there is scope for these to be set (and continue to be set, even by a regional or sub-regional entity) on a local 'catchment' (as opposed to 'district' or 'service-area') basis. Charging structures are likely to require simplification and alignment over time, to avoid overcomplicating the new entity's systems on day one and to avoid early price shocks for consumers.
- The WSCCO will have a significant challenge to transition these into a simple set of services with fair and transparent prices. This will be a key task for the first three years of operation, which will be supported by the proposed economic regulation framework.

Transitional period:

- Until a WSCCO is fully up and running (about 2027), water prices are likely to be based on existing council rates with increases based on what councils have set through their LTPs. These levels of increase will vary from council to council.
- A key assumption is that there will be a **three-year price differential lock in period** to help ensure that consumers do not receive a major price shock on transition. This could be applied evenly to residential charges across the region, thereby maintaining existing residential price differentials. (Note: This is subject to existing revenues being sufficient to cover the full costs of water service provision, i.e. the council having set the existing revenue at a sufficient level to fully fund the costs of water service provision per the water services Financial Impact Statement).

Ability to charge customers

Based on the Government announcements on 8 August 2024, it is assumed that legislation will include provisions to enable boards of water organisations to:

- assess, set and collect water services charges, including charges for any or all of the following:
 - o water supply, wastewater, and stormwater (where applicable),
 - o the initial connection to one or more of the above services,
 - contributions to the capital costs of infrastructure needed to service additional demand on the network, and
 - meeting the costs that the water organisation incurs in performing and exercising its functions.
- determine how charges are assessed and invoiced, when they are due, and how they will be paid or collected.

31. Financing sufficiency - Financing and borrowing

Requirement: funding and financing arrangements are sufficient to meet investment requirements.

Actual debt required will depend on the selected investment strategy and will need to balance efficient financing of long-term assets to ensure equity. The WSCCO will need to carefully use increased levels of debt to manage the rate of price increases, balanced with the costs of servicing debt and therefore the longer-term total cost to consumers.

The Government announcements on 8 August 2024 and subsequent information from the LGFA confirmed some of the financing arrangements that will be available to support WSCCOs.



- The LGFA will support leverage for water organisations up to a level equivalent to 500% of operating revenues (around twice that of existing councils), subject to water organisations meeting prudent credit criteria.
- The LGFA has subsequently indicated that this will be based on FFO. Basing the criteria on FFO is likely to result in the WSCCO being able to borrow less than the indicated 5x revenue limit. This would be negotiated between the LGFA and WSCCO.
- LGFA will treat borrowing by water organisations as separate from borrowing by parent council or councils.
- A parent council(s) guarantee or uncalled capital (proportionate amongst shareholders) will be required.
- The additional debt funding from the LGFA is only available to water CCOs ('water organisations')57 who must meet prudent lending criteria and have the characteristics of an investment-grade utility provider over the medium term (within 10 years).

Key points to note based on the in relation to financing and borrowing:

- 1. **Opening debt:** It has been assumed that the WSCCO will inherit about \$2.3 billion of debt in 2027 from the councils. This is because when water assets transfer, so would the associated revenue collection powers and associated debt. *The opening debt at 1 July 2027 is currently a placeholder and subject to ongoing review will need to be confirmed as part of Phase 2 and 3.*
- 2. Source of funds: It is assumed that as a water organisation, the entity will rely on the LGFA as its lender. The LGFA is currently working on the covenant framework that will apply to WSCCOs. LGFA has indicated it will align with the covenants used by the WSCCO international peers. The primary metric being the ratio of Funds from Operation to Net Debt, where a ratio of >9% is the minimum standard setting required to maintain an investment grade rating.
- 3. The **long-term funding** objective is to reach a sustainable position, whereby operations and infrastructure are funded by the generation(s) that benefit. The long-term strategy for achieving this objective is to:
 - ensure today's revenues are sufficient to fund the delivery, operation and maintenance of fully compliant services/infrastructure for today's generation58 (sustaining + catch up + growth + compliance), and
 - use debt to fund capacity growth for the benefit of future generations.
- 4. **Transitional funding:** For about 10 years, revenue is likely to be insufficient to cover the full delivery and investment costs of the current network and services, resulting in a potential funding shortfall. Therefore, the transitional funding strategy is to:
 - phase in the price increases necessary to correct the revenue shortfall at a rate which is acceptable to consumers,

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

⁵⁷ 'Water services provider' means all forms of local government provider and including councils that continue with direct (inhouse) delivery as well as new water organisations. The term 'water organisation' refers only to separate organisations that councils may establish to provide water services and does not include councils with direct (in-house) delivery.

⁵⁸ A utility operating at a financially sustainable level would typically have an optimal gearing ratio of about 40%. Once the optimal gearing level is reached, and depending on the level of debt used to fund growth, equilibrium can likely be maintained by ensuring operating cash flows are sufficient to cover renewals expenditure and using debt to fund growth expenditure.



- spread catch-up remediation over a 20–25-year period. This is still relatively fast and would help to stabilise and prevent further deterioration of the network, and
- gear up the balance sheet to a fiscally prudent level to manage the rate of price increases and ensure efficient and equitable use of debt.

The accompanying financial projections are set out in Appendix J.

32. Potential for efficiency gains and economies of scale

Efficiency can be defined as: the act of spending less and receiving the same outcome, or of receiving a better outcome for the same level of spending. This does not mean less jobs. On the contrary, this report assumes that significantly more people will be employed in the water sector.

The scenarios modelled have not made any assumptions or allowance for efficiency gains.

It is considered that it will be challenging to deliver efficiency at a meaningful scale during the early establishment years of a WSCCO as the organisation sets in place the required capability and capacity to deliver. As the organisation then grows in maturity there will, however, be some significant opportunities for efficiency gains over time which can lead to overall lower costs for consumers and better outcomes for the community and the environment.

Key opportunities to deliver efficiency include^{59 60}:

Preconditions: Efficiency is dependent on the set-up of the organisation and the broader water services system including governance and regulation, and:

- the entities need to have effective governance arrangements and be able to attract and retain appropriately skilled management,
- regulatory compliance and enforcement with water quality and other matters is effective,
- effective economic regulation is established, and
- the entities have access to the necessary resources to fund the amalgamation and reform processes and over time make the required investment.

Economy of scale: Efficiency can be achieved through economies of scale, focused on shared consumer use of networks. This includes:

- standardisation of materials and plant and consumables,
- fit for purpose procurement and supplier management processes,
- power cost savings,
- improved systems and use of technology,
- focused design principles for network design to provide for reliability, capacity, redundancy, and growth in all planning⁶¹,
- ensuring that the assets in the network are maintained and replaced appropriately to avoid the additional cost burden from failing assets such as leaks,
- certainty of workflow which allows the supply chain both to invest and reduce unit costs,
- a genuine commitment to benefit sharing and sharing the risks of innovative approaches, and

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

Page 137

⁵⁹ Water Industry for Scotland, Economic analysis of water services aggregation, May 2021.

⁶⁰ Three waters reform, review of methodology and assumptions underpinning economic analysis of aggregation. May 2021,

farrierswier.

⁶¹ Cost estimate for Phase 2 and 3 is indicative only and subject to a range of risks and assumptions including the passage of legislation.



• both capital and operational savings achieved through asset rationalisation.

Capability: Scottish Water managed to retain and reward the high-quality staff, attracting talented senior management and building the required capabilities (for example, on strategic asset management and water modelling). This has, in turn, allowed it to achieve additional capital investment efficiencies through improved asset planning and strategic asset management.

Network efficiency: Optimal network efficiency requires intensive designing and planning, with focus on the in-house skills required to do this. It is a lot cheaper to change a design before it is implemented rather than after. It makes sense to make sure it is right before building it as the network will need to last for many decades. This includes:

- building for long life this is the only way to get efficiency from capital reworking networks destroys this,
- maintaining the network well the network is at its most efficient when it is not 'going wrong', all forms of which create a cost burden, and
- ensuring a mechanism for continuously piloting innovation.

Compliance costs: Planning for and investing to make resilient networks, rather than continually undertaking reactive maintenance leads to lower compliance costs. Besides the highest priority being on safety (drinking water, wastewater containment, flooding management etc), the main focus of compliance should be on network and plant reliability and immediate capacity constraints.



Evaluation of the recommended regional delivery model

Section summary

Under the Preliminary Arrangements Act, councils need to confirm their approach to a WSDP – whether they want to develop a joint WSDP with other councils and the extent of any joint arrangements; for example, for all or only some water services.

Councils must assess in the course of the decision-making process on the WSDP, both their existing service delivery model and the option of establishing, joining or amending a WSCCO or a joint local government arrangement. If they choose, they may also consider other options for delivery of water services. The assessment of (at least two) alternatives needs to be credible with sufficient information to ensure decision-makers can reach a properly informed view.

This report does not deal with the assessment of the status quo delivery model in each district, or potential options for delivering water services other than the recommended model, as these are matters for each council to consider. However, to support councils to undertake this assessment, the recommended regional option has been evaluated here in relation to the key requirements and other key factors including cost to implement, risk, level of benefits and political acceptability.

The evaluation will help councils to undertake a comparative analysis of service delivery options, as well as the scope and approach to ongoing development of a joint WSDP and WSCCO.

33. Assessment of options

Under the provisions of the Preliminary Arrangements Act, councils need to **confirm their approach to a WSDP**: Whether to develop a joint WSDP with other councils (section 10) and the extent of joint arrangements (section 11), for example, for all or some water services.

Each council's assessment of service delivery options (at least 2 as noted above, one of which is the status quo) needs to be credible. The analysis can identify a preferred option but must also ensure that decision-makers have sufficient information to reach a properly informed view and make their own assessment of advantages and disadvantages of the different options, including by reference to the matters set out Part 3 of the Act.

Making this decision should enable the council to commit to the development of a joint WSDP, or to take another approach. This will then inform the scope, approach and timeline for this work.

34. Evaluation of recommended model

The recommended model is for a full-breadth water utility vested with ownership of all regional water assets, revenues and liabilities; with a similar structure to a CCO but with reduced council oversight, to ensure sufficient financial and decision-making separation from council owners.



An *initial* evaluation of the recommended model has been undertaken in relation to the key requirements and other key factors, including the ability to meet new regulatory requirements, alignment with Government announcements on 8 August 2024 (including minimum requirements), cost to implement, risk, level of benefits, and political acceptability.

For each factor, the relevant benefits, risks and challenges and key assumptions have been identified. This evaluation is subjective and has been informed by the current state case for change as outlined above.

The evaluation is intended to help support and inform:

- councils to undertake a comparative analysis of the recommended model and the status quo, and
- the scope and approach to ongoing development of a joint WSDP and WSCCO.



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Table 13:	Evaluation of	recommended	regional model	- penetits,	risks and	cnallenges,	assumptions

Key requirements identified by councils	Alignment with council requirements	Benefits	Risks and challenges	Assumptions and details to work through
Water consumers	Good alignment	 Council ownership ensures ongoing public ownership and protection from privatisation. More affordable and transparent pathway for water services than may be possible under current local government funding constraints. Customer focus and local delivery model part of design. Compliant services through increased investment and capability. Scale of organisation enables continuous improvement. Higher rates of investment deliver better network outcomes and levels of service. 	 Assurance of no loss of service and local delivery. Ability to meet environmental compliance requirements in the short term will be challenging. Will require price increases under all scenarios. Transitional pricing arrangements. Understanding that key relationship will be with WSCCO not with councils. 	 Establishment of the economic regulator to support consumer protections. Role of Taumata Arowai and GWRC as environmental regulators. Organisational design and operating model for a regional WSCCO is set up to meet these expectations for local service delivery. Overall impact of change (increased and separate water services charges, impacts on rates) to be understood.
Councils	Good alignment	 Financial separation from councils will result in improved council financial metrics including revenue to debt for most councils. Council governance role enables alignment of investment and outcomes. Clarity of accountability between WSCCO and councils. Long-term approach to planning and investment. Scale to enable efficiency and capability. Three waters model. 	 Financial impacts on councils post reform to be confirmed. Confidence of alignment on outcomes given financial pressure on WSCCO. 	 Confirmation of principles and process for transfer of debt, revenue and liabilities. Assessment of alternative options. Public acceptability of need for change and preferred model. Approach to stormwater in relation to Bill 3.
lwi/Māori	Good alignment	 Meaningful role and influence through governance and operations. WSCCO to embrace Te Mana o te Wai. Improvement to water quality. 	 Time to address water quality issues. 	 Confirmation of role and influence through foundational documents. Establishment of meaningful operational relationships and structures.



Future water entity	Excellent alignment	 Empowered to operate independently. Skills-based Board. Long-term planning and investment. Full service and good quality systems. Depth and breadth of people. 	 Time to establish and reach full organisational maturity. High consumer expectations with high price rises. Establishment costs. 	•	Sufficient investment to 'set up right'. Establishment process and timeframes. Ability to retain and grow capability and capacity.
Central Government	Good alignment	 Alignment with minimum requirements for delivery models. Financially sustainable model by 30 June 2028. Scale to deliver. Increased compliance with regulation and ability to comply with economic regulation. Enables housing growth. 	 Alignment on stormwater policy settings. 	•	Public acceptability of need for change and preferred model.
Transition	Reasonable alignment	 Equitable and fair process for transfer. A focus on people with clear pathways. Seamless change. 	 Time and cost to agree preferred model and implementation. Costs to establish. Risks of disruption during establishment phase – delivery, people, networks. Lack of certainty of which councils are part of a future WSCCO / WSDP 	•	Confirmation of principles and process for transfer of debt, revenue and liabilities. Confirmation of principles for transfer of people. Alignment with requirements of Bill 3. Sufficient resourcing to plan and deliver change process.



Table 14: Other key factors

Other key factors	Alignment with other key factors	Comment
Ability to meet new regulatory	Good alignment	• Scale and level of investment, capacity and capability of the WSCCO will enable alignment with compliance including economic regulation and improved water quality.
requirements		• Will be some ongoing challenges to deliver full compliance in the shorter term with environmental compliance due to costs and level of investment required.
Alignment with Government announcements 8	Good alignment	 Recommended model aligns very well with Government announcements on 8 August 2024 including minimum requirements for delivery models. This includes protection against privatisation and a similar structure to the 'multi-council owner water organisation' outlined in DIA guidance including similar governance and accountability framework.
August 2024		• Recommended model well aligned with the proposed funding arrangements from the LGFA including meeting requirements for a 'water organisation'. It is important to note that LGFA will only lend to WSCCOs that are financial supported by their parent council(s). This means that either a guarantee or uncalled capital will be required from councils to match the liabilities of the water CCO.
		• Potential area of misalignment is in relation to urban stormwater and policy requirement that councils retain legal responsibility for stormwater including revenue, even if service delivery and assets are transferred to a water organisation. This will require further consideration. It appears workable but may pose challenges in relation to ensuring sufficient revenue for stormwater and alignment of broader investment by a WSCCO.
Cost to implement	Some challenges	 Costs to complete detailed work required to complete a joint WSDP and an implementation plan will be high and are not currently budgeted for by councils.
		• Implementation costs for a full service WSCCO are expected to be high, in part driven be the need for fit for purpose IT processes and systems. This will need to be funded by way of an establishment fund against the balance sheet of the new WSCCO.
Risk	Some challenges	• Shorter term: Coordination of planning and delivery of a joint WSDP and joint WSCCO will be challenging with multiple risks of time, cost and scope. See list of risks and assumptions below.
		 Longer term: The scale of a joint WSCCO will have significant ability to manage network and investment risks due to scale, capacity and capability.
Level of benefits	Excellent alignment	Investment in water is critical to the health, well-being and economic sustainability of our region and will enable significant regional benefits. A large, full-service, asset-owning WSCCO is considered to provide opportunity to deliver on a range of benefits based on effective leadership, depth of expertise, influence with government, easier integration with regional spatial planning, digital capability and financial scale to tackle network challenges. Key potential benefits include:
		• New homes: The investment will better enable planned growth and new housing of both greenfield and brownfield for the region.



		• More jobs: The investment will require growing the capability and capacity of the water industry to deliver the required works.
		 Resilience: Over the next 20 years, an estimated 44% of the network could be replaced, building significant resilience for future events. Investment will also address the region's critical water shortage challenges through meters, increased water storage and fixing leaks.
		 Scale and efficiency: Addressing these issues at scale and coordinating efforts across council boundaries offers significant opportunities for efficiency and reduced long-term costs.
		 Focus on affordability: Household costs for water services will increase. Under the proposed regional model, there is an opportunity to ensure that affordability remains a key focus for delivery with lower total costs in the long run through effective use of funding and financing arrangements than are currently available to councils.
		 Potential efficiency gains over time through strategic investment decisions, supply chain management and reduction in duplication of roles.
		More expertise and capacity.
		Better able to respond to regulators.
Political acceptability	Good alignment	Recommended model aligned with expected direction in Bill 3 for asset-owning WSCCO as outlined by Government announcements on 8 August 2024.
		• The level of political acceptability across multiple councils is still to be confirmed through council decision-making processes.
Position of councils	Good alignment	• The recommended regional model was developed with considerable input from councils from the AOG, Chief Executives and officers through workshops and feedback.
		• At time of writing and based on feedback from councils on the draft version of this report, no significant issues with the recommended model have identified and the model is considered to be the 'best for region'. This is not the same as 'best for council' and each council will need to undertake its own evaluation and decision-making process in line with the requirements of legislation.


35. Other key assumptions

Other relevant assumptions include:

- Bill 3 policy parameters as expressed in the 8 August 2024 announcements, are given effect in the Bill introduced in December 2024.
- Bill 3 is introduced into the House in December 2024 and will introduce details for a new asset-owning WSCCO, that will provide this type of organisation with the necessary purpose, powers and functions to meet the region's requirements.
- Councils have sufficient information to confirm a preferred approach to water services delivery by the end of October 2024 in order that detailed development of a WSDP can get underway from November 2024.
- Councils are able to undertake stakeholder and community engagement as required by legislation. Councils have sufficient information to undertake annual plan reviews and amend their LTPs as required.

36. Other key risks and challenges

Other relevant key risks and challenges include:

- Mandate and support
 - o political support, including due to timing of local government elections,
 - o lack of alignment on decision making by councils,
 - o lack of support or loss of confidence in the process by councils,
 - o lack of support from Government, including required legislative changes,
 - o lack of buy-in or understanding from community, and
 - o lack of support or loss of confidence in the process by lwi/Māori partners.
- Decision making process and requirements for council decision making is unclear or not understood resulting in rework and/or challenges to decision making (such as judicial review).
- **Model** future models are not financially viable.
- **Resourcing** lack of effective resourcing for the process by councils, including capacity of senior staff, or funding for future phases.
- **Scope** balancing expectations of detail vs progress.
- Quality analysis and outputs do not support effective decision making.
- Timing
 - o ability to be agile and respond to changing needs,
 - o ability of councils to make decisions on a timely basis,
 - o alignment of process and consultation to LTP amendment process, and
 - o ability of councils to make decisions ahead of local government elections in 2025.
- **Legislation** misalignment with legislation or legislation does not enable the preferred model.
- **Engagement** lack of clarity on engagement and consultation requirements of new legislation or these are unworkable.



- Impacts on existing delivery models and productivity due to uncertainty of the potential change process.
- Impact on councils' ability to enable and deliver on growth. The decisions, priorities and capacity of a water services organisation will have significant impact on a range of council activities. It will be challenging to ensure close coordination between councils and the water organisation to ensure councils are able to drive and deliver on directions without an added layer of complexity or being at the mercy of another organisation's priorities. This is especially important for housing growth where the water organisation will be a growth plan taker rather than a plan maker.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

88

Implementation considerations

Section summary

Decisions on subsequent phases of work to consider a joint WSDP and WSCCO are expected to be made on an in-principle basis by late 2024 in order that these can be further developed.

Phase 2 will need to include development and delivery of the WSDP. This will support councils to make decisions in relation to the development and adoption of a regional WSDP that meets councils' legislative obligations, as well as establishing joint arrangements for the delivery of water services and preparing for the subsequent implementation of the preferred approach in Phase 3.

Phase 2 includes the need to undertake consultation and engagement on at least part of the WSDP relating to the proposed service delivery model, and the implementation planning required for Phase 3. This will involve significant decision making in relation to early establishment resources, accountabilities and funding.

The draft regional WSDP will need to be aligned with requirements of Part 2 of the Preliminary Arrangements Act including:

- asset condition information and a related AMP,
- funding, financing and revenue requirements to achieve financial sustainability,
- the anticipated or proposed model or arrangements for delivering water services, including how these will meet compliance requirements, and
- an implementation plan for the WSDP including timeframes and milestones, and how a future delivery model would be established in Phase 3.

Implementation planning will consider the potential establishment of a large, full-service, multi-council-owned WSCCO.

Details regarding the structure, accountabilities, decision-making rights and resourcing will need to be finalised. Decisions will need to be made on a high-level operating model and organisational design, with a service delivery model, change process and strategy, entry and exit rights, as well as requirements for information systems, legal, procurement, and costs, budget and funding.

The strategy, processes and principles will also need to be established for debt and asset transfer, pricing, contract transfer, people transition, customer experience and billing.

Councils will need to undertake communications, engagement and formal consultation during Phase 2. It is assumed that councils will confirm a regionally coordinated approach to this with the process still based on individual decision making by each council.

An indicative timeline and costs are shown below. Key transition principles will need to be followed to complete the transition in a fair and equitable manner.

37. Next phases of work

Subsequent phases of work to consider a joint WSDP and WSCCO will be informed by the decisions councils make in relation to a joint WSDP and joint arrangements. It is expected that



these will be made on an in-principle basis by late 2024. This is on the assumption that some or all councils commit to an ongoing process to develop a joint WSDP.

Figure 10: Phases of work



Phase 2 will include development and delivery of the WSDP. This will support councils to make decisions in relation to:

- the development and adoption of a regional WSDP that meets councils' legislative obligations, and
- establishing joint arrangements for the delivery of water services as described in the WSDP and preparing for the subsequent implementation of the preferred approach in Phase 3.

Phase 2 includes the need to undertake consultation and engagement on at least part of the WSDP relating to the delivery model and the implementation planning required for Phase 3. This will involve some significant decision making in relation to early establishment resources, accountabilities and funding.

The two key outputs from Phase 2 are:

- a draft regional WSDP, and
- an implementation plan for the establishment of the selected future delivery model.

Scope of a regional WSDP

The draft regional WSDP will need to be aligned with requirements of Part 2 of the Preliminary Arrangements Act. Guidance and templates provided by the DIA in September 2024 have helped to clarify requirements but, in general, the WSDP can be conceived as having four parts:

- asset condition information and a related AMP,
- funding, financing and revenue requirements to achieve financial sustainability,
- the anticipated or proposed model or arrangements for delivering water services, including how these will meet compliance requirements, and
- an implementation plan for the WSDP including timeframes and milestones.



38. Implementation plan

The implementation plan is also to be aligned with the requirements of Part 2 of the Preliminary Arrangements Act and will need to comprise the plan for how a future delivery model would be established in Phase 3. The detail of the plan will be driven by the delivery model selected by councils. Initial planning will need to be on the assumption that the selected model will be a WSCCO as outlined in DIA guidance in August 2024. The details of what this entails, its powers and funding arrangements will not be known until the Bill 3 is released in late 2024. Pending this, it is expected that the implementation plan will include:

- The preconditions that need to be met before the establishment of the entity can commence.
- Governance arrangements during both the establishment period and steady state, including arrangements for establishing an appointments panel, the role of Iwi/Māori, a Board constitution, shareholder agreements, and clear timelines and decision points for the establishment and transfer of decision-making rights to the establishment Board and Chief Executive.
- Entry and exit rights of shareholders and the timing and process for this including potential review point after 3-5 years.
- The structure, accountabilities, decision-making rights and resourcing for an establishment entity (potentially comprising a Chief Executive, selected functional leads and specialist support). This would include clear handover points between the project team and the establishment entity.
- The strategy, processes and principles for:
 - o debt and asset transfer
 - o financing for new WSCCO
 - o pricing
 - o contract transfer
 - o people transition
 - o customer experience and billing.
- A high-level operating model and organisational design.
- Service delivery model and local service locations.
- Change process and strategy.
- Information systems requirements.
- Legal requirements, including merger and acquisition, incorporation, banking and tax.
- Costs, budget and funding.
- Procurement strategy.

39. Engagement and consultation

To meet legislative requirements, and understand the position of partners, stakeholders and the community, it is assumed that councils will undertake communications, engagement and formal consultation on at least part of the WSDP (relating to the proposed service delivery model) during Phase 2.

Further details on required public consultation are set out in the Preliminary Arrangements Act, including a simplified consultation and decision-making process. It is assumed that councils will

confirm a regionally coordinated approach to consultation and engagement and a key question for Phase 2 is the optimal timing for consultation. Any consultation process will still be based on individual decision making by each council.

The scope and approach of this will be confirmed as part of the establishment of Phase 2 based on the legislative requirements of the LGA and the Preliminary Arrangements Act.

This process is likely to include:

- early engagement with key partners and stakeholders from September 2024,
- confirmation of consultation approach and alignment with LTP amendment processes by March 2024, and
- formal consultation process on the WSDP and WSCCO linked to consultation on an amendment to the LTP April/May 2024.

40. Indicative time and cost for Phase 2

The issues considered during Phase 2 are significant, relating to investment planning for billions of dollars of investment in water assets and operations. Implementation planning will consider the potential establishment of a large, full-service, multi-council-owned WSCCO. This will have a significant impact on councils, including future role, operating model, financial arrangements and scale.

This is a challenging, complex and highly political process in the context of evolving legislation and is made more challenging due to the need to work across multiple councils, lwi/Māori partners, central government, statutory consultation with the public and input from other stakeholders.

This will be challenging to complete in the 12-month period required by Bill 3 and is highly contingent upon the timing of Bill 3 and ability of councils to align consultation processes with LTP amendments.

Indicative costs to complete this work will depend on a range of factors including number of councils, timeline, consultation requirements, and guidelines from DIA. At this point the indicative cost range to complete Phase 2 for all ten councils on the timeline above is in the order of \$2-\$3 million⁶². This cost would need to be split across participating councils on an agreed basis.

The indicative timeline and key workstreams to enable delivery of a joint WSDP by September 2025 is shown below. This is a work in progress and will continue to be refined and confirmed by late 2024 informed by decisions by councils on whether to remain part of the regional WSDP process.

92

⁶²This is an indicative cost estimate and will be further refined and confirmed by the end of October 2024.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model



Figure 11: Workstream phases





41. Indicative timeline and cost for Phase 3 – establishment of a WSCCO

Implementation costs and timeline will be developed during Phase 2 and are highly contingent on the model, scale, and day one requirements of a WSCCO.

It is assumed at this point that the best-case scenario for time required to fully establish a WSCCO once councils adopt a WSDP is 12 months. This is based on the modelling and timeline developed by DIA to establish the proposed 10-entity structure. A tentative 'go live' date for a new WSCCO is therefore assumed to be by early 2026 with some ongoing transitional handover from councils to the WSCCO through to 2027. This may include a staged process to manage resourcing and risks.

Phase 3 costs are expected to increase markedly, as this phase involves establishment of a new entity, including set up of systems and processes. This will require a larger and more dedicated team and budget.

During Phase 2, the potential option of an early drawdown on the new WSCCO funding facilities to cover the costs of Phase 3 will be explored. It is anticipated that the entity's funding facilities would be provided by the LGFA with any early drawdown guaranteed by the owner councils.

Phase 3 establishment of a large regional WSCCO entity is estimated to cost somewhere in the order of \$75 million to more than \$125 million. The wide range is due to the costs for establishment of a new delivery model depending on many factors (scale, timing, resourcing model etc). These costs would need to be staged over time and in large part are driven by the costs of fit for purpose IT systems and processes.

42. Key transition principles

The transition process from existing delivery models to a new delivery model will be very challenging. Through the key requirements, councils have identified some issues that will need to be successfully navigated during the transition phase. These will help complete the transition in a fair and equitable manner and have been captured as key transitional principles. These will need to be reviewed and reconfirmed as part of the next phase of work to develop a WSDP and implementation plan.

People

- **People are at the heart:** The region has a team of highly committed people with irreplaceable expertise who deliver the region's water services and who have remained dedicated through an extended period of uncertainty within the water sector. The region has a values-based duty to water service teams and people to resolve the uncertainty, establish a high-quality future entity and make the staff transition as smooth and seamless as possible.
- From an operational perspective, the region cannot deliver high-quality water services without the support of these teams and people. The water sector currently has a **significant skills deficit**, and the region can ill-afford to lose valuable staff due to a poorly executed transition.
- Job guarantee and pathway: An intention to provide water services staff with certainty as quickly as possible. Accordingly, the new WSCCO would need to consider putting in place a job guarantee and pathway for all water staff from Level 3 down (Level 1 and 2 being Chief Executive and senior executive levels respectively).



• **Clear communication and dialogue:** There is a need to open clear communications and dialogue channels with all affected employees as soon as there is a way forward.

Financial transition principles

- **Equitable debt transfer:** The amount of debt that each council transfers to the new water entity will have a major bearing on the financial health of both the water service entity and each council. Agreeing a fair and equitable debt figure with each council will be a complex exercise.
- **Independent expert:** The standard practice for this type of 'merger transaction' is to appoint an independent financial expert to establish the accounting principles for preparing the settlement accounts, including the debt figure.
- **Review of accounts:** The external financial expert reviews each party's settlement accounts to ensure that they have been prepared in accordance with the specified principles. If the expert deems that the accounting principles have not been equitably and consistently applied, then they are empowered to issue a determination as to the final figures to appear in the settlement accounts. This approach provides all parties with confidence that the debt figures will be determined on a fair, consistent and equitable basis.
- Equitable asset transfer: A number of councils have experienced very large changes in their water asset valuations in recent years (for example, Wellington City Council saw an 88% uplift in 2022 and Hutt City Council approximately 300% in 2024). The valuation of assets is likely to be less contentious than debt, but accounting standards require a consistent and current valuation at the date of transfer. Accordingly, an independent valuer will be retained to provide a consistent and up-to-date valuation at the date of transfer.
- **Primary purpose:** Assets whose primary purpose is to enable the provision of water services will transfer to the new entity. During the transition phase, a principle-based framework will be designed and applied to determine the treatment of shared assets.
- **GWRC:** It is noted that GWRC has stated that the Hutt and Wainuiomata conservation/catchment land will not be transferring, and that the new entity will be granted the necessary rights to continue using and accessing the catchments and land identified for future storage, for water supply purposes.
- Share allocation: The shareholdings will be allocated between councils. A potential approach is based on pro rata of the value of net assets transferred. This would ensure that the value of shares received by a council matches the net asset value of the water services balance sheet it transfers. As a result, the transfer should have a neutral impact on a council's P&L account (i.e. it should not generate a profit or loss for the transferring council).

Consumer transition principles

• Three-year price differential lock in period: A common concern raised by councils in workshops was the need to ensure that ratepayers did not receive a major price shock on joining a regional entity, as a result of price harmonisation or price rises to cross subsidization of adjacent regions. To alleviate this concern, during the first three years, the potential price rises outlined in the section above on local delivery, customer service and price will be applied evenly to residential charges across the region, thereby maintaining existing residential price differentials. (Note: This is subject to existing revenues being sufficient to cover the full costs of water service provision, i.e. the council

having set the existing revenue at a sufficient level to fully fund the costs of water service provision per the water services Financial Impact Statement).

• **Revenue and pricing** will be a very complex area given the diverse pricing structures that exist across the region. For example, there are very diverse charging structures for non-residential services such as developer contributions. These are likely to require simplification and alignment to avoid over complicating the new entity's systems on day one. This is the reason for applying the "differential lock in" principle to residential charges only.

Contract and relationship transition principles

- **Contract transfer:** To smooth the transition and continuity of service provision, the baseline principle will be to roll over existing contracts and relationship agreements, by way of novation or assignment to the new entity. A clear detailed framework and rules for shared contracts or unusual contracts will be developed during the detailed design phase.
- **Te Tiriti obligations:** The transition will pay particular care to ensure that any Te Tiriti undertakings are not only legally transferred, but that lwi/Māori have a clearly identified relationship structure to work with the new entity. The aim is to ensure that both the legal agreement and personal relationships are seamlessly transitioned (noting that it will take time to nurture new relationships and trust).

43. Next steps

Based on the requirements of legislation, councils will each need to make decisions on whether to develop a joint WSDP with other councils in the region with joint delivery arrangements, for example, across drinking water, wastewater and stormwater services; and whether to establish a joint delivery model.

It is expected that councils will make this in-principle decision by late 2024 in order that work can be progressed. Councils may choose to continue to develop other options in parallel.

The evidence in this report confirms the need for change. The status quo cannot continue and, under the requirements for developing a WSDP, councils will need to make some difficult choices about how to fund and deliver the urgent work needed on the three waters network.

The recommended regional model is considered well aligned with the key requirements set by councils and the emerging legislative framework that gives effect to Local Water Done Well. This recommended model will need to be assessed in relation to the status quo and any alternative arrangements that councils might choose to identify and assess.

Significant aspects of the recommended model will require further development and decision making in line with the requirements of Bill 3. This will require ongoing input and discussions with DIA to ensure that there is alignment.

Completion and decision making in relation to a joint WSDP and WSCCO in the 12 months required by the Preliminary Arrangements Act across multiple councils will be challenging. This will be a complex process in the context of evolving legislation working across multiple councils, lwi/Māori partners, central government, statutory consultation with the public and input from other stakeholders. It will therefore be imperative that councils work effectively together and with the Government to maintain momentum and ensure analysis and further phases of work support effective decision making.

Recommended Wellington regional approach to a joint Water Services Delivery Plan and delivery model

96



Councils can maintain momentum by:

- considering the recommended regional model and deciding to whether to develop a joint WSDP with other councils and the extent of any joint arrangements,
- assessing the status quo, alternative CCO model (may or may not be the recommended model) and, if they choose, other service delivery options,
- making in-principle decisions on the proposed model by late 2024 in order that this can be further developed,
- consulting on the draft WSDP (at least the part containing the proposed model) from late 2024 and into 2025,
- considering the implications for council, including the need to amend the LTP,
- adopting the WSDP (and any LTP amendment that may be required), and
- planning for implementation of the WSDP in 2025 (especially if a new model is to be adopted).



Appendices

Note: A separate document containing detailed appendices is available, including:

Appendix A: Clarification of the alignment with the requirements of a WSDP Appendix B: Detailed key requirements Appendix C: Key assumptions, sources of information and levels of confidence Appendix D: Council profile summaries (separate document) Appendix E: Network condition information Appendix F: Key compliance issues Appendix G: Types of entity model options Appendix H: Network economics approach Appendix I: Investment, price and debt scenarios Appendix J: Financial projections



ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024



Wellington Region Water Services Delivery Planning Appendices to report on Recommended regional approach to a joint Water Services Delivery Plan and delivery model

October 2024















Absolutely Positively Wellington City Council Me Heke Ki Pôneke





LIMITATIONS AND DISCLAIMER:

Purpose

These appendices support the report titled "Recommended regional approach to a joint Water Services Delivery Plan and delivery model" dated 4 October 2024.

That report aims to provide sufficient information to support decision making by councils on whether to develop a joint Water Services Delivery Plan (WSDP), and joint delivery model with other councils in the region.

The report does not represent the position of any of the councils involved in this process but rather outlines a recommended 'best for region', concept-level delivery model for a regional Water Services Council Controlled Organisation (WSCCO) to deliver water services in the region, should councils decide to adopt this approach. It follows the requirements of Government policy and legislation and provides a robust strategic-level analysis of the case for change and investment required.

The report is not intended to fulfil the statutory requirements for a WSDP nor to be a basis for investment decisions. A full WSDP along with further development and decisions on the proposed delivery model, will need to be developed by councils later, based on the confirmed approach. Councils will need to separately consider and evaluate alternative options in relation to the recommended model to inform decision making.

Limitations of information and analysis

The information in these appendices has been based on best available information and is intended as a strategic and directional-level analysis to inform decision making on an approach to a WSDP, rather than the level required of a complete WSDP or to inform investment decisions. Where possible, the sources and limitations have been noted. As new or more robust information becomes available, this will be used to further inform and refine the analysis. Key assumptions, sources of information and levels of confidence are set out in Appendix C. This includes how information has been verified where possible, including through discussions with council officers and Wellington Water (WWL) staff to ensure accuracy and correct interpretation. There are a number of documents referenced in this report, (such as the draft Entity G Asset Management Plan) that were developed by the Department of Internal Affairs (DIA) but never finalised. These have been relied upon in the absence of other information in order to significantly reduce the time and costs of this process. As noted, reasonable efforts have been made to cross-check such information with other sources.

It should be noted that:

- Forecasts almost always turn out incorrect, especially over a 30-year horizon.
- There is great difficulty in estimating investment requirements over the next 30 years given poor information on asset condition, lack of detailed engineering assessment of what is required to address water quality to match the proposed water quality standards, and uncertain growth investment.
- Choices need to be made over a myriad of modelling approaches, inputs, and assumptions that reasonable minds may disagree with over some decades.
- There is a range of decisions yet to be made and legislation to be enacted to give effect to reform of water services.
- All modelled network economics figures should assume to have a +/-20% accuracy such as in relation to revenue, investment and debt over the 30-year period, which is considered a sufficient level of accuracy for strategy decision-making purposes at this stage. Some of these, such as the available asset condition metrics, are known to be weak.
- However, based on the analysis of information and cross-checking, there is a relatively high level of confidence that the analysis is directionally correct and sufficiently robust to support the strategic level of analysis in this report and the decision making that it is intended to support.
- As noted, the detail will be subject to ongoing refinement and change as more accurate, specific information is identified and councils complete the required detail in a WSDP.



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Contents

Appendix A: Clarification of the alignment with the requirements of a WSDP	5
Appendix B: Detailed key requirements	8
Appendix C: Key assumptions, sources of information and levels of confidence	12
Appendix D: Council profiles	22
Appendix E: Network condition information	23
Appendix F: Key compliance issues	27
Appendix G: Types of entity model options	31
Appendix H: Network economics approach	34
Appendix I: Investment, price and debt scenarios	
Appendix J: Financial projections	52



Appendix A: Clarification of the alignment with the requirements of a WSDP

Table 1: Alignment of the report with requirements of a WSDP (as described in Section 13 ofthe Local Government (Water Services Preliminary Arrangements) Act 2024)

Contents of Water Services Delivery Plan: A territorial authority's Water Services Delivery Plan must contain the following information in relation to the water services delivered in the authority's district:

See	ction 13(1)	Relevant section of this report	Notes and limitations
(a)	a description of the current state of the water services network:	Sections 10 -17	
(b)	a description of the current levels of service relating to water services provided:	Section 14	High-level delivery models only
(c)	 a description of — (i) the areas in the district that receive water services (including a description of any areas in the district that do not receive water services); and (ii) the water services infrastructure associated with providing for population growth and development capacity: 	n/a	
(d)	whether and to what extent water services — (i) comply with current regulatory requirements: (ii) will comply with any anticipated future regulatory requirements	Section 16 Appendix F	High-level overview only
(e)	if any water services do not comply with current regulatory requirements or will not comply with any anticipated future regulatory requirements — (i) a description of the non-compliance; and (ii) a description of how the anticipated or proposed model or arrangements provided under paragraph (j) will assist to ensure water services will comply	Section 16 Appendix F	High-level overview only
(f)	details of the capital and operational expenditure required — (i) to deliver the water services; and (ii) to ensure that water services comply with regulatory requirements	Sections 17, 26-32	High-level overview only
(g)	financial projections for delivering water services over the period covered by the plan, including —	Section 29 Appendix I	High-level overview only



	(i) the operating costs and revenue required to deliver water services; and	Appendix J			
	(ii) projected capital expenditure on water services infrastructure; and				
	(iii) projected borrowing to deliver water services:				
(h)	an assessment of the current condition, lifespan, and value of the water services networks:	Section 13	High-level overview only		
(i)	a description of the asset management approach being used, including capital, maintenance, and operational programmes for delivering water services:	n/a			
(j)	a description of any issues, constraints, and risks that impact on delivering water services:	Sections 10-17	High-level overview only		
(k)	the anticipated or proposed model or arrangements for delivering water services (including whether the territorial authority is likely to enter into a joint arrangement under section 9 or will continue to deliver water services in its district alone):	Sections 18-25	High-level overview only		
(l)	an explanation of how the revenue from, and delivery of, water services will be separated from the territorial authority's other functions and activities:	n/a			
(m)	a summary of any consultation undertaken as part of developing the information required to be included in the plan under paragraph (j):	n/a			
(n)	an explanation of what the territorial authority proposes to do to ensure that the delivery of water services will be financially sustainable by 30 June 2028:	n/a			
(0)	an implementation plan — (i) for delivering the proposed model or arrangements described under paragraph (j); and (ii) if a territorial authority is proposing to deliver water services itself and not as part of a joint arrangement for delivering water services, that sets out the action that the territorial authority will take to ensure its delivery of water services will be financially sustainable by 30 June 2028:	Sections 37-43	High-level overview only		
(p)	any other information prescribed in rules made by the Secretary under section 14.	n/a			
Sec	etion 13 (2)				
For	the purposes of subsection (1)(o), an implementation plan	must include the follow	wing:		
(a) a	a process for delivering the proposed model or arrangemer	nts:			
(b)	(b) a commitment to give effect to the proposed model or arrangements once the plan is accepted:				

(c) the name of each territorial authority that commits to delivering the proposed model or arrangements:

(d) the time frames and milestones for delivering the proposed model or arrangements.



Section 14

Contents of joint water services delivery plan

(1) A joint water services delivery plan must contain the following:

(a) information that clearly identifies each territorial authority that is proposed to be a party to the joint arrangement:

(b) information as to whether the joint arrangement will deliver—

(i) all water services for all of the territorial authorities that are parties to the joint arrangement; or

(ii) all water services except for some or all services in relation to all of the territorial authorities' stormwater networks; or

(iii) all water services for some of the territorial authorities, and all water services except for some or all services in relation to stormwater networks for the other territorial authorities:

(c) all of the information listed in section 13:

(d) information on the likely form of the joint arrangement, including whether it is anticipated it will involve water services being delivered by—

(i) a joint WSCCO; or

(ii) an arrangement described in section 137 of the LGA2002; or

(iii) another organisation or arrangement that the territorial authorities are considering.

(2) To the extent that further information about the joint arrangement is available when the plan is submitted to the Secretary under **section 18**, a joint water services delivery plan may also contain that information, including—

(a) the ownership structure; and

(b) the governance structure; and

(c) the control and financial rights of each territorial authority in the joint arrangement.

(3) For the purposes of **subsection (1)(c)**, a joint plan must contain the information required under **section 13** in relation to—

(a) each territorial authority that is a party to the joint arrangement; and

(b) all water services delivered in the joint service area (including services relating to each territorial authority's stormwater network).

(4) **Subsection (1)(c)** applies to a territorial authority's delivery of water services relating to its stormwater network even if the delivery of those services is not part of the joint arrangement.

(5) A joint plan must also comply with any requirements prescribed in rules made by the Secretary under **section 16.**



Appendix B: Detailed key requirements

As part of the development of a recommended 'best for region' approach, councils identified a number of issues that will need to be addressed as part of the development of a WSDP and WSCCO and these have been captured as key requirements. It is recognised that the categorisation used here for different organisations and groups is subjective and that some requirements relate to multiple groups (for example, water is a taonga for all, not just for lwi/Māori).

These will need to be reviewed and reconfirmed as part of the next phase of work to develop a WSDP and implementation plan based on the outline below, as well as the minimum requirements for delivery models expected to be set out in Bill 3.

Consumer requirements

Public ownership: All councils in the region have expressed an absolute commitment to ensure that the provision of water services remains under public ownership. This is consistent with the model adopted by most countries around the globe with many examples of the model working successfully (for example Australia).

Affordable water; fair, equitable and transparent pricing: Delivering affordable water is a major challenge, not just in New Zealand but in most developed economies. A recent World Bank Study ("Funding a Water Secure Future") determined that the percentage of GDP spent on water infrastructure by developed economies was currently 0.5% and needed to rise 2.7-3 times current levels in order to achieve Sustainable Development Goal targets. This is consistent with the economic analysis in this report and is a material change from current price levels.

Increases to price and ensuring affordability will need to be managed very carefully and will require ongoing engagement with communities and careful use of financial tools to manage the rate of cost increases.

Recent consultation by councils through LTP processes has identified that ratepayers are prepared to spend more on fixing the water infrastructure if there are demonstrable improvements. Implementing an efficient and effective model will be essential to secure consumer support.

Price setting and price increases will ultimately need to be determined by a new WSCCO. This will be done in the context of new economic regulation, which will have a strong focus on price and quality based on actual cost to provide sustainable networks and services.

The new entity will inherit a diverse suite of revenue sources and pricing structures. It will be very challenging for the entity to transition these into a simple set of services with fair and transparent prices. This will be a key task for the first five years of operation. The transition principles in the main report are designed to provide councils with confidence that their residential ratepayers will not experience any major rebalancing of prices in the early years of the entity and that any subsequent rebalancing of charges will be phased in over time.

High-quality, seamless, environmentally compliant services: As noted, ratepayers (water consumers) have indicated a willingness to pay more for water services if they experience demonstrable improvements in service quality (reliability, reduced leaks, improved discharge quality etc).



Customer focus: This is a key requirement, particularly for smaller councils such as Kāpiti Coast and the Wairarapa councils, where there is a strong concern about loss of service levels to a larger regional model. Councils have expressed a strong view that any future regional WSCCO would need to provide a high level of local service delivery and not result in a loss of service quality levels for communities.

Continuous improvement: The extent of the challenges faced means that the creation of a new model and delivery entity will be merely the start of a continuous drive to optimise services and delivery processes. The range of services and processes to be optimised is extremely wide. For example, from the optimisation of pipe replacements in the field to the streamlining of data collation and reporting for regulatory purposes.

lwi/Māori requirements

Aspirational vision and water treated as taonga: The most important requirement expressed by Iwi/Māori is that the entity shares an aspirational vision to restore te mana o te wai. This should be at the heart of a new entity's vision and DNA.

Meaningful influence: Iwi/Māori feedback has been supportive of a skills-based Board where treaty and cultural awareness are two of the key skills required. Iwi/Māori also want to see a genuine commitment to local/Māori procurement.

Water & environmental quality improvement: Iwi/Māori are looking for a major, ongoing commitment to improvement of water quality.

Future water entity

Empowered to operate independently: The entity will inherit a wide range of services, assets, systems, investment requirements and billing arrangements. This includes assets and systems which are beyond the end of their life. The entity will require mandate to prioritise investments if it is to resolve the challenges in a cost-effective and optimal manner.

Independent, skills-based Board: Following on from the previous requirement, the magnitude of the challenges will require not only the mandate to optimise but also the appointment of an exceptionally skilled Board. These skills will need to include commercial, cultural, people and transformational expertise. The Board will need to appoint an exceptional executive leadership team.

Certainty to plan, fund and invest optimally: This is firstly about independence so that the entity can commit to a long-term investment plan without the plan being "chopped and changed" by short-term funding and political shifts. Secondly, given the potential funding shortfall, the entity will also need to have confidence that it has committed debt funding lines, albeit that they may be linked to the entity demonstrating that it is on track to achieve its key business plan milestones.

Full breadth, integrated utility: One of the major learnings from the current WWL model is that there needs to be a single entity accountable for the effective delivery of water services. In particular, the entity needs to own, and have full control over the assets, revenue streams and funding facilities, if it is to resolve the challenges and provide seamless services to water consumers.

High-quality systems and staff: High-quality people and system capabilities will be essential for the entity to meet the challenges it inherits. The new regulatory environment will also require a quantum shift in the data collection, analysis and reporting capabilities of all water delivery services.



Councils

Sustainable funding and financing (prior to the Government's policy announcements made in August 2024 around new financing options for councils via the LGFA, this was noted as 'balance sheet separation'): Local councils and central government require water services revenue, costs and borrowings to be financially sustainable in line with legislative requirements by 30 June 2028.

Local influence to ensure alignment of accountabilities, particularly for growth: While recognising that the entity has to be independent, councils also require the entity to support urban growth and deliver broader community outcomes. Historically, councils have found it challenging to fully fund new growth from Development Contributions or Financial Contributions. Councils have had to fund growth infrastructure from general rates, debt or defer growth infrastructure. Councils have a requirement that the new entity must support housing growth and also plan and invest to ensure the entity supports broader outcomes of the community.

Single point of accountability for service delivery: One of the learnings from the Wellington Water model is that all parties (including consumers, councils and entity staff) require a single point of accountability who is responsible and takes ownership for the delivery of water services.

Water delivery entity has strong processes, systems and data: As noted, the lack of investment in WWL's foundational systems, and associated high-quality information has inhibited the performance of WWL and has also been a perpetual source of frustration for councils. Councils require a new entity that has high-quality core systems.

Long-term planning horizon: Councils need to work with utilities (electricity, water, telecommunications) that take a long-term approach and can be meaningful partners with councils in planning the long-term development of the region.

Economies of scale & integration: All councils require a regional entity to deliver economies of scale, both financial and depth of operating model capabilities. In addition, the city councils require a single entity to manage the highly integrated city water services network.

Three waters (for all?): Further consideration will be required in relation to urban stormwater. WWL currently manages the delivery of all three water services for the metropolitan councils and South Wairarapa District Council. This includes responsibility for the reticulated stormwater network. Over the past decade, this definition of the scope of the stormwater responsibilities delivered by WWL has worked well. It provides a relatively simple delineation point and suits the metropolitan area, which has legacy waste and stormwater networks that were designed with a high number of integration and interconnection points. Accordingly, the metropolitan councils will require a future, regional entity to provide a similar scope of stormwater services. The situation in the semi-urban or rural council areas is different. The network topography has a lower level of integration between the wastewater and stormwater networks. In addition, these areas make greater use of open, as opposed to reticulated, stormwater drains.

Council financial sustainability: The demerger of each council's water services creates two potential issues for each council in respect of their residual activities:

- i. Stranded costs: i.e. overheads which a council will still incur, that were previously recovered from the water services. Examples include the fixed cost of support services and fixed software licence costs;
- ii.Reduced debt capacity: the LGFA typically sets a council's maximum debt limit at 3 times revenue. If a council's water-related debt:revenue ratio is less than the council's current



average ratio then the demerger of the water services will leave the residual council with a higher debt:revenue ratio and reduced debt capacity than it has today.

These two issues are likely to affect all councils. They may even create financial sustainability issues for some councils.

Central Government

The Government has several requirements for delivery models, with further details of these expected as part of Bill 3. The Government has stated that councils can design their own arrangements as long as they meet clear, minimum requirements set out in legislation including meeting regulatory standards and financial sustainability requirements. There will be restrictions against privatisation and there will be additional requirements for water organisations to ensure they are operated and governed effectively.

Financially independent and sustainable: Central Government requires water service entities to be financially sustainable.

Compliant with regulation: Central Government requires water service entities to be able to "meet all regulatory standards and requirements for delivering water services". This requirement will be very challenging for the region's wastewater discharges and will depend on how the changes to the National Policy Statement for Freshwater Management flow down into the Taumata Arowai wastewater standards and then into the Regional Councils' plan and resource consent process. The timeframe for achieving standard compliance will be particularly important.

Enables housing growth: The Government has simply stated that a water services entity is required to demonstrate how it will "unlock housing growth".

Scale: The legislation supports regional collaboration and the creation of regional water services delivery entities.



Appendix C: Key assumptions, sources of information and levels of confidence

Table 2: Key assumptions – Economic Model

Item	Assumption	Sources of information	Confidence/Limitations
Network condition	21% of regional network in poor or very poor condition	 AECOM Entity C Working Draft Asset Management Plan 2024 – 35 (draft, not finalised). AECOM Entity G Wellington/Wairarapa Initial Draft Asset Management Plan 2024 – 35 Version 1.1 October 2023 (draft, not finalised). AECOM and Tonkin and Taylor, Entity G Wellington Wairarapa Initial Draft Asset Management Plan Version 2.0 December 2023. Feedback and clarifications from councils on asset condition information Interviews with council staff. Interviews with WWL staff. Council staff review and feedback. 	 Network pipe condition assessment by approximately 10% sampling. Pipe condition assessment extrapolated to treatment plant condition assessment due to lack of specific data. Low-medium data accuracy confidence. Confidence in impact of asset condition assessment on required funding is considered acceptable.
Network valuation	Network replacement value \$19.7 billion	 The valuation is based on the triangulation of the following valuations: \$21.2 billion WICS Entity G valuation produced for DIA (\$20.4 billion plus \$0.8 billion for Horowhenua). \$21 billion indicative valuation provided by WWL for WWL Councils to Entity G team, plus the replacement cost asset values for Horowhenua, Kāpiti, Carterton and Masterton. 	 Reasonable level of confidence that the value of the network is between \$19 - \$21 billion. The latest council asset valuations indicate \$19 billion, but majority of these are still in draft and not yet final. Asset replacement valuations in water networks fluctuate due to changes in available civil contracting costs.



	 \$19.2 billion latest three water asset valuations from WWL Councils (but with latest WCC, HCC and UHCC valuations and associated uplifts yet to be added in). Plus, the replacement cost asset values for Horowhenua, Kāpiti, Carterton and Masterton. https://www.dia.govt.nz/diawebsite.nsf/Files/Water- Services-Reform/\$file/Entity-G-(Wellington)-2054- projected-household-costs.xlsx 	
Levels of service	 WWL Quarterly reporting to the Wellington Water Committee. WWL Statement of Intent. Council LTP information. Council feedback on challenges and issues. 	 Low confidence in reported fault rates for councils without metering due to: increasing faults backlog not included in fault costing. historical financial reporting of leak cost means costs are at least one year behind actual. leaks require public reporting. underground leaks are not visible and not included in reporting in areas without metering.
Compliance Operational expenditure	 WWL reporting. Council reporting. Council feedback on compliance issues. Council LTP information. 	 Drinking water compliance is well specified. Wastewater discharge compliance standards are still fluctuating. Economic compliance (waters delivery price & quality) is yet to be introduced. High confidence in the draft LTP numbers and detailed budgets for strategic modelling purposes.
		• The draft LTP information will be updated with the final council approved



	 LTP budgets for the next version of the model. The detailed budget and assumptions could be refined further at a later stage once the entity setup is confirmed, and more detailed information is available from councils.
Capital expenditure	 2024 LTP 10 yr forecast intentionally does not contain all capital required to maintain the water network or to support growth over the 10 years. Many of the large capital expenditure items required sit outside of the 10 yr
	LTP process and are not yet allocated to water by councils.

Table 3: Key assumptions – Financial Model

Item	Assumption	Sources of information	Confidence / Limitations
Revenue – price change	9% real pa after growth and inflation	 Base case assumption per economic modelling chapter. Range of different price scenarios are able to be modelled. 	 This is a placeholder based on average price. Further work is required to conclude the price affordability vs financial sustainability challenge. This is not an indication of actual price or charging.
Revenue – population growth	Average 1.3% pa	 Local council projections for the 2024 LTP, including forecast information from the 2023 Wellington Regional Housing and Business Capacity Assessment (HBA) Update report prepared for the Wairarapa-Wellington- Horowhenua region in September 2023. 	 Reasonably reliable noting has been ongoing fluctuations in population growth and immigration / emigration.



		https://wrlc.org.nz/wp- content/uploads/2024/04/HBA3-Draft-full-report- with-COVER-updated-16.02.24.pdf	
Revenue & Expenses – water consumption volumes	No change to current consumption		 This will become important if meters and volumetric charges are rolled out. Typically, meters lead to a ~30% reduction in water required.
Revenue & Expense Inflation – staff, maintenance, operations & capital expenses	2.6% 27/28 2.5% 28/29 2.3% 29/30 2.2% average pa thereafter	• Sourced from the 'Cost adjusters 2023 interim update' produced by BERL for 2024-34 Long Term Planning purposes. The water and environmental management adjustor have been used.	 Accurate at date of estimate. Likely to reduce based on slowing economy. Reduction in expense inflation will be counterbalanced by reduction in revenue inflation.
Staff Expense – vacancy rate	8%	• Expense based on costed organisation design reduced by 8% assumed level of vacancies.	• Reasonable confidence as this is based on Wellington Water Limited's historical vacancy rate.
Staff Expenses – capitalisation of labour	40% of personnel costs	• Capitalised labour is a conservative assumption based on Wellington Water Limited's 23/24 labour recharge to projects budget scaled up for the regional entity.	 This is a conservative assumption. e.g. Watercare capitalise almost 80% of staff costs.
Consequential Operating & Maintenance Expenses – from new capital expenditure	0% except \$5.4 million for sludge minimisation	 The one material growth investment is the Wellington Sludge Minimisation Facility. A \$5.4 million pa uplift in operating costs has been factored in from 27/28 based on information provided by Wellington City Council. 	 80%+ of capital expenditure is renewal or improvement to existing infrastructure. This should lead to a longer-term reduction in repair costs - hence the assumed 0%. The one material growth investment is the Wellington Sludge Minimisation Facility.



			• A \$5.4 million pa uplift in operating costs has been factored in from 27/28 based on information provided by Wellington City Council.
Interest Rates	5.47% 27/28 5.47% 28/29 5.47% 30/31 6.01% average pa thereafter	 Years 1-4 based on LGFA borrowing yield for an unrated guarantor plus a credit rating adjustment of 5 basis points pa for a regional water entity. 	 Accurate at date of estimate. Likely to reduce based on slowing economy. Any reduction in interest rates likely to be accompanied by reduction in inflation and hence offset reduction in revenue inflation assumption.
Depreciation (useful lives on existing assets) • Drinking Water • Wastewater • Stormwater	31 years 37 years 61 years	 Average remaining useful lives on existing assets were calculated based on depreciation budgets and asset book values provided by Councils. 	 High level of confidence for strategic modelling purposes. Actual useful lives of individual assets may vary and can be refined at a later stage once detailed asset information is available from councils.
 Depreciation (useful lives on new assets) Drinking Water Wastewater Stormwater 	55 years 70 years 100 years	 A weighted average useful life of 74 years has been used across the 3 water assets based on the book value information provided by councils. 	 There is a reasonable level of confidence on the weighted average useful life for strategic modelling purposes. Actual useful lives of individual assets maybe higher or lower than forecasted. This information can be further refined at a later stage once the detailed investment is confirmed for the new water entity.
Opening debt	The opening debt of \$2.3 billion at 1 July 2027 is a placeholder at this stage. The final will	• The opening debt for 1 July 2027 is based on the forecasted opening debt figure for 2025 provided by Councils, which have been rolled forward based	• The debt figures for the 10 councils are placeholders only and will need to be agreed during Phase 2 and the Establishment Phase.



	be based on figures agreed with councils.	on the final adopted 2024 LTP income and expenditure.	
Forecast opening asset book value	\$9.5 billion for 24/25	• The forecast opening asset book value for 24/25 is based on council forecast 24/25 opening asset book value of \$7.4 billion plus the impact of recent draft valuations on Optimised Depreciated Replacement Cost (ODRC) of \$2.1 billion.	• There is a reasonable level of confidence in the draft valuation figures. The assumptions can be refined once the current valuations are finalised, and when a full valuation is undertaken prior to transition to the new entity.
27/28 Opening revenues	\$697 million	 For the first 3 years of the plan, the forecast uses the councils' 2024 final adopted LTP operating revenue as a base after adjusting for known revenue that will no longer exist under the new entity such as the GWRC Levy. The revenue is then projected out from year 4 based on the following assumptions: Adjusting for known one-off revenue and other revenue that will no longer exist under the new entity such as the Wastewater Joint Venture revenue. It is also assumed that IFF levies on the new Sludge Minimisation Facility will remain with Council. Rates revenue – the real price path 9% per annum assumption (after allowing for inflation and growth). Non-rates revenue – BERL inflation adjustor (after growth has been applied to customer base where applicable). Note: Other income may include some interest income which should be netted off against interest expense. The amount is not material. 	• There is a high level of confidence in the final adopted LTP information, but the forecast price increase of 9% is a placeholder at this stage. Further work is required to conclude the price affordability vs financial sustainability challenge.



27/28 Staff (net of capitalised labour) Expense	\$64 million	 Staff costs (\$109 million) are based on the Entity G detailed organisational design and estimated jobsizing for roles, including other employment costs. Any potential savings from governance arrangements are offset by additional staff transferred from Horowhenua. A vacancy factor of 8% has been applied, and 40% of the remaining total personnel costs is assumed to be capitalised. 	 There is a reasonable level of confidence in the estimates as it is based on best available information at the time. The forecast assumes that all roles are full-time equivalents, but some roles may potentially be part time. The cost would reduce accordingly. This can be refined further at a later stage once the entity setup is confirmed.
27/28 Maintenance Expense	\$71 million	 Maintenance costs largely consist of planned/routine and reactive maintenance. The forecast spend is based on WWL's maintenance budget forecast for Year 1 of the 2024 LTP for WWL shareholding councils with a 15% uplift for Carterton, Kāpiti Coast, Masterton and Horowhenua based on historical portion of spend between the councils. 	 There is a reasonable level of confidence in the estimates as it is based on best available information at the time. The detailed budget and assumptions can be refined further at a later stage once the entity setup is confirmed, and more detailed information is available from councils.
27/28 Operations Expense	\$80 million	 Operations costs mainly consist of operation technology, disposal, general treatment plant operations, and compliance costs. The forecast spend is based on WWL's operations budget forecast for Year 1 of the 2024 LTP for WWL shareholding Councils with a 15% uplift for Carterton, Kāpiti Coast, Masterton and Horowhenua based on historical portion of spend between the Councils, plus provision for power costs of \$16 million that is currently paid by the Councils (not included in WWL forecasts). 	 There is a reasonable level of confidence in the estimates as it is based on best available information at the time. The detailed budget and assumptions can be refined further at a later stage once the entity setup is confirmed, and more detailed information is available from councils.
27/28 Planning & investigations	\$41 million	The forecast spend is based on WWL's budget forecast for Year 1 of the 2024 LTP for WWL shareholding Councils with a 15% uplift for	• There is a reasonable level of confidence in the estimates as it is



		Carterton, Kāpiti Coast, Masterton and Horowhenua based on historical portion of spend between the Councils.	 based on best available information at the time. The detailed budget and assumptions can be refined further at a later stage once the entity setup is confirmed, and more detailed information is available from councils.
27/28 Other Operating Expenses	\$78 million	 Digital costs - \$19 million budget based on a prorata of Watercare's digital costs (e.g. laaS, software licensing etc). 7 FTEs for technology staff have been budgeted under personnel costs. Rates expense - \$15 million based on the national forecast from the Three Waters programme allocated on population. It assumes 70% of three waters related land will transfer to the entity. Insurance - \$15 million based on 2022 council premiums with an uplift applied for impact of asset valuations and inflation increase based on analysis done through the Three Waters programme. Other costs of \$29 million including administration, consultancy, motor vehicles, telecommunications, bad and doubtful debts, Taumata Arowai regulatory costs – based on a combination of pro-rating Watercare's costs or based on forecast from the Three Waters programme as appropriate. The Data and Digital costs were a placeholder until the impact of the actual system solution and costs are known, therefore the related costs may be higher or lower than forecasted. 	 There is a reasonable level of confidence in the estimates as it is based on best available information at the time. The detailed budget and assumptions can be refined further at a later stage once the entity setup is confirmed, and more detailed information is available from councils.



		 The Rates Expense costs were based on high-level estimates from the Three Waters programme and require detailed information from Councils to understand actual costs which may be higher or lower than forecast. Insurance costs were a placeholder until an insurance strategy is worked through for the new entity. 	
27/28 Depreciation	\$277 million	 Depreciation is based on assumed asset lives rather than actual asset lives and calculated on the projected capital investment profile with an allowance for the impact of asset revaluations. Actual useful lives may be shorter or longer than the assumptions used, therefore the depreciation cost maybe higher or lower than forecasted. 	 Reasonable level of confidence based on assumed average useful lives. Actual useful lives may be shorter or longer than the assumptions used and can be refined at a later stage.
27/28 Capital	\$522 million	 For Years 1-3, the capital investment profile is taken from councils' final adopted 2024 LTPs. For Years 4 onwards, the capital investment total is taken from the Network Economic Analysis and inflation adjusted. The resulting value of the total envelope should more than encompass the existing Year 4-10 LTP. However, the new entity will almost certainly recast the capital plan for this period. At this stage, the capital expenditure figures exclude establishment, transition and set up costs. These will be significant. \$20 million pa has been allowed for ongoing property, vehicles, digital and sundry capital expenditure. This is based on a pro-rata of Watercare and Wellington Water Ltd budgets. 	 There is a high level of confidence in the final adopted LTP information. The capital investment plan from Year 4 onwards will likely be recast by the new entity. Provisions for establishment and transition setup costs need to be made at a later stage.



Table 4: Other key documents and sources

Docum	nents and sources
•	Review into the Future for Local Government (2023) He piki tūranga, he piki kōtuku, Wellington: New Zealand.
•	Wellington Regional Leadership Committee Regional Dashboard, https://wrlc.org.nz/reports/housing-data
•	The Mayoral Taskforce on the Three Waters Report (2020)
•	Wellington Water Limited Statement of Intent (2024)
•	Water Industry Commission of Scotland (WICS) Reports (2021)
•	DIA Three Waters Reform – WICS Modelling Phase 2. Beca Ltd (April 2021)
•	Three Waters Review: Release of second stage evidence base. DIA briefing to Government (20 May 2021)
•	Report of the Havelock North Drinking Water Inquiry: Stage 2 (2017)
•	Three waters reform. Review of methodology and assumptions underpinning economic analysis of aggregation. farrierswier (May 2021)
•	Water Industry for Scotland, Economic analysis of water services aggregation (May 2021)
•	Wellington Water Limited: capital programme estimating and budget systems. Roy Baker and Kevin Jenkins (2024)
•	Contract Optimisation review conducted by FieldForce4. (2023)
•	Inquiry into the cessation of water fluoridation by Wellington Water. MartinJenkins (2022)



Appendix D: Council profiles

See separate document – Appendix D¹

¹ At time of writing, no information for the profile had been received from Carterton District Council.

Appendices to final report: Recommended Wellington regional approach to a joint WSDP and delivery model 22



Appendix E: Network condition information

Overall network asset condition assessment

Information below uses the calculations as follows:

- 1. Each of the asset measurements is normalised (total set to 100%) from raw data as wastewater adds to 99%, and stormwater has 11% of the network as "not assessed".
- 2. Weight average asset conditions are calculated weighted by pipe length.
- 3. Pipe condition was extrapolated to include other asset classes (only treatment plants are material) as there are no individual condition assessment of other asset types, and pipes make up 80-90% of asset replacement value (dependent on council district) and so is likely materially accurate.

Note: This approach is less than ideal but is the only reasonable approach given the scarcity of good asset condition assessment.

Asset	Condition	As reported	Normalised
Water supply			
	Excellent	37%	37%
	Good	30%	30%
	Medium	16%	16%
	Poor	11%	11%
	Very Poor	6%	6%
	Not assessed	0%	
Total		100%	100%
Wastewater			
	Excellent	24%	24%
	Good	20%	20%
	Medium	22%	22%
	Poor	12%	12%
	Very Poor	21%	21%
	Not assessed	0%	
Total		99%	99%
Stormwater			
	Excellent	33%	38%
	Good	25%	28%
	Medium	17%	19%
	Poor	6%	7%
	Very Poor	7%	8%
	Not assessed	11%	
Total		99%	100%

Table 5: Overall network asset condition assessment

Reticulation (km)					
	Water supply	3,310			
	Wastewater	3,090			
	Stormwater	1,930			
Total		8,330			
Weighted Average Condition	Weighted Average Condition				
	Excellent		26%		
	Good		28%		
	Medium		24%		
	Poor		10%		
	Very Poor		11%		
Total			99%		

Source: Base information is AECOM Asset Management Plan V2.0 figure 11, page 34.

Original information was taken from AECOM Asset Management Plan V1.1 figure 11, which did not contain asset class values or regional breakdowns.

This asset condition information has been checked by councils and WWL and further updates on asset condition information have been received from councils.

Note: There appears to be an arithmetic error in AECOM Asset Management Plan V2.0 page 35 which incorrectly states:

"Around 15% of the pipe network has been assessed as in poor or very poor condition, representing more than 1,200 km of pipe that will be requiring increasing maintenance and renewal in the short term. This is described further in Section 9 - Asset Renewals Needs"

The 15% appears to be calculated incorrectly but only in this version of the report. The raw figures provided are the same as per version 1.1 and correctly add to 22% as per version 1.1 and calculations as per Table 6 and Table 7 below which have also been adjusted with further updates from councils.

Combining the 10% Poor and 11% Very Poor results in **21%** of the network past the end of service life (EoSL).


Asset condition assessment by council

Table 6: Summary of asset condition assessment by council

Weighted Average Condition	Greater Wellington Regional Council	Carterton District Council	Horowhenua District Council	Hutt City Council	Kāpiti Coast District Council*	Masterton District Council	Porirua City Council	South Wairarapa District Council	Upper Hutt City Council	Wellington City Council	Weighted
Network Length (km)	187	159	961	1845	1065	444	1065	209	662	2,728	~9,325
Reticulation											
Excellent	16%	12%	22%	26%	22%	38%	38%	6%	54%	35%	31%
Good	39%	23%	51%	39%	33%	14%	20%	18%	20%	24%	30%
Medium	39%	36%	10%	16%	10%	14%	10%	46%	11%	15%	15%
Poor	5%	22%	3%	10%	11%	14%	11%	11%	9%	10%	10%
Very Poor	0%	7%	5%	8%	23%	19%	20%	17%	7%	16%	14%
Not Assessed	1%		9%	1%	1%	1%	1%	2%			
Total	100%	100%	100%	100%	100%	100%	100%	100%	101%	100%	100%
Beyond EoSL	5%	29%	20%	24%	2%	34%	23%	14%	15%	26%	21%

Table 7: Detailed asset condition assessment by Council

		Greater Wellington Regional Council	Carterton District Council	Horowhenua District Council	Hutt City Council	Kāpiti Coast District Council	Masterton District Council	Porirua City Council	South Wairarapa District Council	Upper Hutt City Council	Wellington City Council	
Asset Condition												
	Water supply											
	Excellent	16%	10%	25%	38%	6%	31%	7%	8%	50%	43%	
	Good	39%	23%	53%	32%	42%	17%	16%	25%	25%	38%	
	Medium	39%	36%	10%	3%	50%	13%	33%	53%	10%	9%	
	Poor	5%	26%	2%	7%	2%	16%	16%	10%	11%	7%	
	Very Poor	0%	5%	2%	20%	1%	8%	18%	2%	4%	4%	
	Not assessed	1%	0%	8%	0%	0%	16%	10%	2%	0%	0%	
		100%	100%	100%	100%	100%	100%	99%	100%	100%	101%	
	Wastewater											
	Excellent		13%	5%	11%	0%	47%	10%	3%	53%	29%	
	Good		23%	69%	37%	23%	6%	15%	12%	17%	16%	
	Medium		32%	6%	23%	77%	10%	46%	45%	13%	12%	
	Poor		22%	5%	12%	0%	12%	23%	15%	8%	17%	
	Very Poor		11%	1%	17%	0%	10%	4%	23%	9%	26%	
	Not assessed			14%	0%	0%	14%	1%	2%	0%	0%	
			101%	100%	100%	100%	100%	100%	100%	100%	100%	
	Stormwater											
	Excellent		18%	49%	23%	5%	9%	10%	0%	61%	35%	
	Good		25%	11%	47%	1%	10%	18%	0%	16%	18%	
	Medium		53%	16%	17%	1%	13%	70%	0%	8%	27%	
	Poor		3%	2%	12%	2%	8%	1%	0%	5%	4%	
	Very Poor		1%	22%	1%	2%	2%	1%	100%	9%	15%	
	Not assessed					90%	58%					
			100%	100%	100%	100%	100%	100%	100%	99%	99%	

		Greater Wellington Regional Council	Carterton District Council	Horowhenua District Council	Hutt City Council	Kāpiti Coast District Council	Masterton District Council	Porirua City Council	South Wairarapa District Council	Upper Hutt City Council	Wellington City Council	Weighted
Asset Sizing												
	Reticulation (km)											
	Water supply	187	75	428	711	478	218	344	118	281	922	
	Wastewater		66	351	680	354	214	427	75	226	1077	
	Stormwater		18	182	454	233	55	294	16	155	729	
	Total	187	159	961	1,845	1,065	487	1,065	209	662	2,728	~9,325
	Treatment Plants											
	Water supply	4	2	5	0	5	2		4			
	Wastewater		1	6	1	2	4	1	4		2	
	Stormwater		0	1	5	0	3					
	Pump Stations											
	Water supply	15	1	1	13	9	1	15		9	34	
	Wastewater		17	53	48	153	13	67	11	17	69	
	Stormwater			19	12	18				7	2	
	Replacement Value (\$m)											
	Reticulation	507	38	234	314	553	128	181	70	200	1,904	4,129
	Treatment Plants	429	36	321	688	390	211	400	43	222	2,973	5,713
	Pump Stations	364	11	80	531	189	57	323	9	232	2,309	4,105
	Total	1,300	85	635	1,533	1,132	396	904	122	654	7,186	13,947

Source: Base information is AECOM Asset Management Plan V2.0 Appendix 2. This asset condition information has been checked by councils and WWL and further updates on asset condition information has been received from councils including KCDC, PCC, MDC and HCC.

Calculations are as follows:

- 1. Each of the asset measurements is not normalised (total set to 100%) because of the risk of high uncertainty when raw data is inflated by high proportions of unassessed network, in particular stormwater for:
 - Horowhenua District Council 22%,
 - Kāpiti Coast District Council 90%,
 - South Wairarapa District Council 100%
- 2. Weighted average asset conditions are calculated weighted by asset class value, as this metric was provided in V2.0 for regions.
- 3. It is likely the pipe condition asset assessment (V1.1) has been used to calculate asset class condition (V2.0) as the figures line up well. This is likely the same approximation that was made for the whole network condition assessment above, but this is not explicit in the V2.0 report.



Appendix F: Key compliance issues

Disclaimer: Compliance information changes from month to month and the material in the table below is based on best available information at the time of this report. For the facilities managed by Wellington Water this information has been taken from the Wellington Water Operations Report to the Wellington Water Committee dated 12 September 2024. For other councils, the information is as supplied in response to the draft of this report in September 2024.

Area / Plant	Compliance	Comment
Waterloo	x Non-compliant	Due to changes in the assurance rules, the capability of the existing Waterloo treatment plant facilities, and the layout of the network, a significant treatment plant upgrade and/or additional network infrastructure is needed to achieve compliance with the rules as written.
Wainuiomata	✓ Compliant	Wainuiomata water treatment plant is compliant with the Water Services Authority bacterial and protozoal compliance rules.
Te Marua	✓ Compliant	Te Marua water treatment plant is compliant with the Water Services Authority bacterial and protozoal compliance rules.
Gear Island	✓ Compliant	Gear Island water treatment plant is compliant with the Water Services Authority bacterial and protozoal compliance rules.
Waiohine	✓ Compliant	The Waiohine water treatment plant is compliant against new bacterial and protozoal Rules. However further work is required to meet process assurance rules e.g. development of standard operating procedures, operators completing qualification requirements, and implementation of an asset maintenance recording system.
Memorial Park	✓ Compliant	The Memorial Park water treatment plant is compliant against new bacterial and protozoal Rules. However further work is required to meet process assurance rules e.g. development of standard operating procedures, operators completing qualification requirements, and implementation of an asset maintenance recording system.
Martinborough	✓ Compliant	The Martinborough water treatment plant is compliant against new bacterial and protozoal Rules. However further work is required to meet process assurance rules e.g. development of standard operating procedures, operators completing qualification requirements, and implementation of an asset maintenance recording system.
Pirinoa	✓ Compliant	Pirinoa is compliant against new bacterial and protozoal rules. However further work is required to meet process assurance rules, such as development of standard operating procedures, and implementation of an asset maintenance recording system.
Ōtaki (KCDC)	✓ Compliant	
Hautere/Te Horo (KCDC)	✓ Compliant	

Table 8: Drinking water compliance status



Waikanae Paraparaumu Raumati (KCDC)	✓ Compliant	
Paekākāriki (KCDC)	✓ Compliant	
Horowhenua District Council	No information supplied	
Masterton District Council	✓ Compliant	Masterton District Council have two drinking water treatment plants, both of which are compliant.
Carterton District Council	No information supplied	

Table 9: Wastewater treatment compliance status

Area / Plant	Compliance	Comment
Moa Point	x Non-compliant	The plant remains non-compliant for suspended solids and faecal coliforms. Steps to fix this are being undertaken. However, breakdowns and planned maintenance work have delayed a return to compliance.
Porirua	✓ Compliant (with noted issues)	The plant is compliant for effluent quality. The treatment plant has higher levels of solids in the process than normal. This can cause partially treated discharges especially during heavy rain. Steps are being taken to address this. There are UV performance issues. Changes made to date have improved UV performance during high volume flows, but occasional faults are still occurring. The system will continue to be closely monitored.
Seaview	x Non-compliant	The plant remains non-compliant for faecal coliforms. Improvements have been observed in the biological process.
Western	✓ Compliant	The plant is compliant for effluent quality.
Greytown	x Non-compliant	Current plant design and processes are inadequate for the connected population, resulting in non-compliance (specifically related to ammonia concentration in the effluent) which is affected by seasonal weather patterns. In 2023, Greater Wellington Regional Council (GWRC) requested explanations of non-compliance. Wellington Water is implementing the required corrective actions where possible within plant and resource constraints. Major investment is required, and current approved funding levels do not meet this. A compliance upgrade project is underway (excluding growth). The plant is already operating beyond its design loading capacity and so new connections have been paused. Funding has been approved to complete a Growth-Capacity Study in conjunction with Martinborough's study. The degree of desludging that will be achieved at Greytown is

		not yet determined.
Featherston	x Non-compliant	Major investment is required to achieve a new consent. Renewal of the consent is being managed as a major project and plant is currently operating on an extension of the old consent. The consent approval process will better inform the required capacity of the plant to cater for growth in Featherston beyond 2032. A significant effluent non-compliance occurred in May-June. This was due to the high volume of septic tank discharges (from Lake Ferry wastewater treatment plant) being pumped into the pond via a nearby manhole. Operational mitigation of this event continues; other septic tank discharges have been stopped until the plant recovers adequately. Plant continues to require ongoing management of resources, focused on effluent quality, to achieve compliance with consent requirements.
Lake Ferry	✓/x Partially compliant	Further investment is required to achieve a management plan and consent compliance into the future. Stantec has been commissioned to prepare and develop a new resource consent application by 30 March 2025. Early conversations suggest that the current scheme will require capital works because of consenting requirements. More funding is required for the consent 2024-25 renewal project than currently allocated. The extra funding is required to prepare an adequate application and undertake community consultation. The source of current high inflow and infiltration is still not funded for investigation. Peak loads are near the plant's hydraulic capacity. Septic tank cleanouts and filter cleaning has been completed. The effect on effluent compliance will be assessed in coming months. The treatment process is being tested and assessed for optimised operation. Plant valving automation is required to better comply with consent discharge requirements; however, this is not funded. Projects underway include sodium bicarbonate dosing improvements and optioneering dripline leaks – some repaired, more require repair.
Martinborough	x Non-compliant	In June 2024, a new 'To Do Abatement Notice' was issued for Martinborough wastewater treatment plant with a deadline of May 2025 to complete desludging This superseded the May 2024 and August 2023 'To Do Abatement Notices', which in turn replaced the Abatement Notice issued in 2022, although the WWTP still remains non-compliant. WWL and SWDC are working together to address the items raised in the new Notice, as part of the compliance upgrade project underway. Major investment is required, and current approved funding levels do not meet this requirement. Current plant design is insufficient to avoid non-compliance. Effluent discharge rate and quality to land continues to exceed current consent limits. Effluent volume discharged to river continues to exceed the annual average consent limit. GWRC has issued an updated To Do Abatement notice, with a deadline of May 2025 to complete desludging. Progress is being made on the desludging geobag laydown area consenting and tendering process, as well as UV optimisation.



ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024

Paraparaumu Wastewater Treatment Plant (KCDC)	✓ Compliant	Operating on expired consent conditions. Securing new consent for the Paraparaumu Wastewater Treatment Plant.
Ōtaki Wastewater Treatment Plant (KCDC)	✓ Substantively compliant	Increasing nitrogen levels in the discharge from the Otaki Wastewater Treatment Plant.
Tokomaru Wastewater Working Party (HDC)	x Non-compliant	An abatement notice has been issued regarding the Tokomaru Wastewater Working Party. Capacity to meet consenting conditions is limited.
Masterton District Council	√/x Partially compliant	Masterton District Council have four wastewater treatment plants, and all have a high level of compliance and environmental sampling does not show any adverse effects on the environment.
Carterton District Council	No information supplied	



Appendix G: Types of entity model options

NOTE: This report focuses on the assessment of regional models and is intended to support councils to undertake an assessment of other options, including those focusing on council alone or provincial options. There will be many sub-variants that councils could identify. A range of these sub-variants has been identified in the table below, but there are others, such as:

- whether joint arrangements cover 2 or 3 waters,
- number of councils or mix of councils in joint options e.g. 3 or 4 councils,
- staging and timing,
- asset and debt transfer arrangements, noting the detail of which would need to be considered as part of the WSDP (Phase 2); and,
- transition there are a range of options for transition that need to be considered through Phase 2 and 3.

Option	Description	Comments
1. Council alone, in- house delivery	Delivery of water services in house, e.g., as per the current Masterton, Carterton, Kāpiti Coast, and Horowhenua models. No joint WSDP or arrangements.	NOT RECOMMENDED AS BEST FOR REGION Councils will each evaluate an in- house option as an alternative option to a regional model.
	 Sub-variants include: Resourcing, procurement and contracting models Deliver in house in a financially ring-fenced Business Unit Deliver in house as a single council CCO 	
2. Joint CCO – service delivery only	 Joint WSDP and arrangements. Multiple council-owned CCO. CCO role: Plans, designs, operates and maintains as per the current WWL model. Assets, liabilities and debt remain on council balance sheets. 	NOT RECOMMENDED AS BEST FOR REGION The current WWL model has struggled with a number of structural challenges which inhibit its effectiveness. Therefore, a narrow CCO option is not considered to meet regional requirements.
3. Joint CCO – full breadth	Joint WSDP and arrangements. Multiple council-owned CCO. CCO role: • Full-breadth water utility vested with ownership of all water assets, revenues & liabilities. • Debt is transferred from councils. • Owned by local councils through shares. • Bills users directly for charges. • Must enable sufficient borrowing.	RECOMMENDED FOR CONSIDERATION This option is likely to be a modified form of a CCO which should achieve balance sheet separation. (Note: Bill 3 will clarify the nature of the powers of this new type of entity).

Table 10: Delivery models considered



4. Joint council- owned company (COC)	 Joint WSDP and arrangements. Multiple council-owned COC COC role: Full breadth water utility vested with ownership of all water assets, revenues and liabilities. Similar structure to a Council Controlled Organisation but with reduced Council oversight provisions thereby enabling the company to have greater control and certainty over its investment plans. 	RECOMMENDED FOR CONSIDERATION This option is likely to be a modified form of a CCO which should achieve balance sheet separation. (Note: Bill 3 will clarify the nature of the powers of this new type of entity). This is the option underlying the design set out in this report. It mirrors the structure now referred to as a joint water services council-controlled organisation (WSCCO) in the Local Government (Water Services Preliminary Arrangements) Act 2024.
5. Consumer trust	 Trust role: Full breadth water utility but owned by a trust. Overseen by independent trustees appointed by consumers. See detail below on variants and issues. Variants: Council alone or joint model. Council alone or joint WSDP and arrangements. 	NOT RECOMMENDED AS BEST FOR REGION This would require councils to transfer their water assets to a consumer-owned trust. The trust would also have challenges accessing the necessary funding. In particular, it would not be able to access LGFA funding as the LGFA's current constitution limits lending to councils and CCOs only.
6. Private sector	Transfer or sale or assets, liabilities and revenue to private sector investor. Variants: • Transfer in whole. • Transfer in part e.g. JV type model.	NOT RECOMMENDED AS BEST FOR REGION This was not explored. The councils held strong views that this was not an acceptable option.

Other possible model options

Below is a summary of other technically possible model options which were not considered to be practical options for further development.

Trust (Potential CCO)

This would be an independent legal entity, established through its trust deed. The trust would have the power to hold and operate the relevant assets, which would be owned by the trust. Some or all trustees could be appointed by the councils. If the councils had the right to appoint 50% or more of the trustees, the trust would be a CCO (meaning LGA accountability measures like the statement of expectations and statement of intent would apply). The trust deed would set out the basis on which the trust would operate, and the powers of its trustees. This model would allow some council control over the entity if the trust were a CCO. However, the model is unlikely to be suitable because councils would have to transfer their water assets to a trust, which is not owned by the councils. Also, for international capital and insurance markets a corporate structure is a more "vanilla" structure.

Non-CCTO Charitable Trust

Another option is a charitable trust (with an incorporated board of trustees or a company trustee), which should be tax-exempt provided that the trust is not a council-controlled trading organisation (CCTO) under the Local Government Act 2002 and is registered under the Charities Act 2005 (such registration being a

prerequisite for income tax exemptions for charities). A not-for-profit public water services trust (reinvesting funds in its assets/services) should be able to be structured as a charity and non-CCTO.

While this option is theoretically possible, charitable status would place significant governance restrictions on the new entity, would involve ongoing regulatory oversight by DIA Charities Services and mean that the assets would be locked up for exclusively charitable purposes in perpetuity. In addition, a non-corporate trust model, even with a corporate trustee, would not enable council ownership of the entity. This option is therefore not recommended, especially if income tax exemption for the new entity can be achieved via legislation (see above).

Limited Partnership

Limited partnerships are legal entities governed by a limited partnership agreement (which the entity must have) and the Limited Partnerships Act 2008. Councils could be the limited partners in a limited partnership; the Limited Partnerships Act requires them to not be involved in management of the limited partnership, in order to maintain the limited liability protection that this model provides. A limited partnership is managed by a general partner. In this instance it would need to be a company that has responsibility for managing the limited partnership. The councils could be shareholders in the company that is the general partner. Another possible option would be for the councils to contribute the assets to, and be limited partners in, a limited partnership that is not a CCTO (as above), which would not be taxed in its own right as its income would be attributed to its limited partners (the councils) and tax-exempt at council level.

While theoretically possible, a limited partnership structure is likely to be unsuitable. It may not achieve the desired balance sheet separation from councils, while from a governance and management perspective it would be desirable for the general partner to not be controlled by the councils. While this model does enable council ownership of water services assets, it is complex and does not result in any material benefits as against using a CCO or COC.

Port company/energy company model

The current definition of "council-controlled organisation" in s6 of the Local Government Act 2002 excludes a port company within the meaning of the Port Companies Act 1988, and an energy company within the meaning of the Energy Companies Act 1992. In both the cases, the apparent policy rationale for these companies not being CCOs, and (notwithstanding that a port company or energy company might otherwise qualify as a CCO, if a local authority owns shares carrying 50% or more of voting rights) is that they are subject to their own regulatory regimes, which require accountability documents such as a statement of corporate intent. Those regimes are inconsistent with, and would to some extent duplicate, the regime for CCOs in the Local Government Act 2002. It is possible that when the Government prepares legislation providing for a new type of COC/CCO (i.e. Bill 3 expected late-2024), it takes guidance from the Port Companies Act 1988 and Energy Companies Act 1992. Accordingly, there may be some similarities between a new COC model and the existing Port and Energy Company models.

Appendix H: Network economics approach

Purpose

The purpose of network economic analysis is to provide transparency to the cause/effect relationships that exist in both technical and economic views of networks. This technique is useful to examine the tradeoffs between decisions that include pricing, growth support, network reliability and risk, capital allocation, debt, compliance, network remediation pace, fault rates and costs, and debt requirements. It is a highlevel view of making the primary cost structures, constraints, and decision levers visible to governance and other decision makers. It is primarily used for choosing scenarios and focusses on differing effects of capital investment distribution.

This helps to provide simple and clear answers to the following critical questions:

- 1. What is the **problem**? How big is the **gap**?
- 2. What is the **best investment strategy**? What is the **risk** of severe network failures? How **quickly** do we need to do it? What will it **cost**?
- 3. How much can be funded from price?
- 4. What is the residual that will need to fund from **debt**?
- 5. Where will the **debt** come from? What **credit support** is required?

The network model enabled analysis to:

- assess the cost of remediation and ongoing investment for maintenance and renewal,
- support analysis of different scenarios and remediation pathways,
- consider remediation investment, time, efficiency, price, and debt,
- consider decision drivers of risk and cost,
- model a range of investment scenarios, including price, debt and risk, and
- recommend a practical scenario to support strategic understanding of:
 - o high-level capital requirements and associated timing, and
 - o the impact on price, debt, risk, and cost and timing.

It is common practice that once these scenarios including capital distribution are chosen, then an investment grade cash-flow analysis is provided using the key decision metrics of the economic analysis. There are two frameworks commonly used for the network economic analysis of capital efficiency. These are:

- "Bathtub Failure Rate Curve" (an engineering concept at the heart of reliability estimation), and
- "Sustainable Replacement Cost" (a microeconomic concept used extensively in asset management).

The modelling used these two frameworks individually to cost the minimum continual investment in the network to maintain its current state (sustaining "keep-up" investment). These were then used together to cost some of the consequential failures generated by worn-out assets, including estimating the cost of network leaks.



Concept 1 – Asset failure rate ("Bathtub") curve

Figure 1: The asset failure rate ("Bathtub") curve



Key points of the asset failure rate curve:

- The ability of all assets to meet their service function declines with use or age.
- Ageing assets start to generate faults due to their reduced condition. In a network, these faults may occur with an asset itself, but also may occur elsewhere in the network due to the interaction between connected assets. This is known as the 'Network Effect'.
- The more worn-out an asset is, the more faults it generates, and the rate of fault generation often increases exponential as an asset's condition reduces (ages).
- There is a natural point at which the expected network fault costs caused by asset deterioration exceed the cost of replacing the asset. This point of asset deterioration is known as the End of Service Life (EoSL) of the asset and is often described in 'years in service', although the actual measurement to determine this metric is measurement of the asset condition. When an asset condition reaches the end of its service life, it is economically sensible to replace it.
- This means that for every asset in a network there is an optimum service life; so, the whole network also has an optimum service life. In practice, this is calculated from assessing the condition of costly and critical assets in the network.
- This means that the optimal use of capital to maintain a network of assets occurs at the maximum average age of the assets. If the assets in a network are used beyond their EoSL, then the cost of the network increases, due to the increased cost of faults from assets that fail. Conversely, if assets are replaced too quickly, then the network also costs more to support because the capital involved is unnecessarily high.
- There is a 'sweet spot' for the efficient use of capital in any network. How far off the actual condition of the network assets are from this sweet spot allows assessment of how much additional cost is being generated by the network.

Appendices to final report: Recommended Wellington regional approach to a joint WSDP and delivery model 35

When the network starts to fail, costs increase exponentially. Fixing faults does not fix the network unless you replace the assets.



Concept 2 - Sustainable network renewal costs

Once a network is operating in its economic sweet spot, it is relatively simple to determine its sustainable capital replacement cost.



Figure 2: Determining sustainable capital replacement cost

Worn-out assets should be replaced with new ones at the same rate as the old ones are wearing out. This annual cost is known as the sustainable (capital) cost of the network ('keep up' investment). It is worth noting that replacing assets at this rate does not improve the condition of the network overall – it simply keeps it at the same condition it is already at.

Replacing assets more slowly than this rate degrades the network and generates an additional cost burden from faults. Conversely replacing assets faster than the sustainable rate improves this condition of the network and lowers consequential costs until the network is back to its economic sweet spot.

It is useful to distinguish between network replacement costs and network fault costs. Network replacement costs are an inherent part of maintaining the network and are not discretionary if network efficiency is to be maintained.

Faults costs (including leaks) are generated mainly by worn-out assets and are one of the consequential costs of network failure. Investing in mitigating consequential costs is not the same as investing in the network itself and, in practice, often diverts investment in network maintenance which further accelerates network degradation.

Asset Life

The 'End of Service Life' (EoSL) for an asset means that its condition has deteriorated sufficiently and that it is economically sensible to replace it with a new one. While the asset age is measured in years of life, it is not its age that determines when it should be replaced – it is its condition.

In the absence of intervention, the increasing and

continuous cost of fixing leaks diverts investment from replacing the worn-out pipes that are the root cause of most of the leaks and so the network generates more leaks. This is a network cost 'runaway' situation – and this is the situation potentially facing much of Wellington's regional water networks.

Network risk analysis is often a major component of network economic analysis and is performed using the trend information on faults, condition assessments and a view of the current fault/expected baseline



fault information. Probability of critical major network failures can be determined if a base probability of failure from a good condition network is provided.

The condition of much of the Wellington regional water networks with its current high rate of leaks and other asset failures means that the chance of a critical network failure event is currently high (estimated as 10 times that of a remediated network). The long timeframes involved in remediating the network (18-30 years) mean that this high risk of critical network failure remains for some time and any extension to the remediation process increases this risk of network failure.



Appendix I: Investment, price and debt scenarios

The network economic modelling is multi-dimensional and can be used to test a wide range of alternative investment, price, debt and risk scenarios. These scenarios are not intended to represent planned investment, but to help understand tradeoffs.

Apart from the rate of catch-up investment, the total investment required was taken as an assumed fixed quantum on the basis that it is the essential investment required to turn the network around and to meet growth and compliance standards. It is noted that this is an *estimate* only of the level of investment required and will require significant further refinement through the development of the WSDP.

Notes:

- Further analysis of financing arrangements, including how the WSCCO can utilise and structure borrowing to manage and smooth the rate of cost increases will need to be fully explored in subsequent phases of work.
- The versions of modelling scenarios have been based on the information, assumptions and limitations as noted in Appendix C.

Scenario Name	Scenario Purpose	Comments and key Insights				
Main price and debt sce	enarios					
Optimised base scenario	Based on consideration and testing of a range of variables, including price, debt, cost and risk, this outlines an overall optimised scenario to remediate the network in 21 years and deliver substantial compliance in 23 years. The scenario can then be used to compare and contrast other scenarios.	There is further optimisation that can be achieved through further refinement of this scenario, but it gives an indication of an optimal and affordable investment pathway based on assumed average of 9% increase in prices.				
 Higher early price of 25% and then 9% 	This scenario is based on the impact of a higher Year 4 price increase in order to reduce total debt and interest costs and achieve an investment-grade FFO:Debt Ratio >9% earlier.	A higher price increase may be considered unaffordable to water consumers. However, this results in lower peak debt and therefore lower costs to service debt and peak prices than the base scenario.				
2. Lower and longer price rise - 5% pa	This scenario takes the investment required to turn around the network as a given and models a lower price rise. It calculates debt as the balancing variable.	This scenario results in a lower average peak price but would result in the network remediation taking 5 years longer. The scenario may also result in the WSCCO exceeding FFO debt limits in early years.				
Main speed of catch up (Backlog Renewal Scenarios)						
3. Go slower – 30-year remediation period with 9% price rise	This scenario looks at remediating the renewal backlog and compliance issues over a longer period. This spreads the capital remediation impact.	This scenario results in a lower average peak price. However, it would also have higher risk of network faults due to the extended period the network continues to be held in its current poor condition.				
Alternative investment	scenarios					

Table 11: Scenario Modelling

Appendices to final report: Recommended Wellington regional approach to a joint WSDP and delivery model 38



Scenario Name		Scenario Purpose	Comments and key Insights		
4.	Investment if 20% increase in construction costs	This scenario models a 20% increase in construction/capex costs and allows for demand inflation due to many national water networks needing to be remediated at the same time.	Results in higher prices to customers – peak and long term and longer term to fix network.		
5.	Investment if 20% decrease in construction costs	This scenario models a 20% decrease in construction/capex costs, recognising that high interest rates and a downturn in the economy have led to some reduced construction costs.	Results in lower prices to customers – peak and long term and shorter term to fix network.		
6.	Faults cost increase	This scenario models \$120 million of faults costs pa.	Results in higher prices to customers – peak and long term and longer term to fix network.		
7.	Increased opening debt	This scenario models if the WSCCO has an opening debt of an additional \$500m or total of \$2.8b. This helps to understand potential impacts of additional financing arrangements.	Results in a potential credit shortfall in 2028 which could be managed based on actual year of borrowing. Results in higher peak and sustainable price.		
8.	Investment level set at LTP levels	This scenario models what the faults costs, risk, price and debt impacts are if the investment level is set at the aggregate of the 10 councils' LTP capital spends for the next 10 years.	This level of investment continues to degrade the network, increases costs to the consumer and results in a continually increasing consequential cost from network failure. This level of investment makes the eventual remediation of the network more expensive and costs to the consumer rise.		

Table 12: Financial modelling and analysis – refer also to the diagrams below that explain the linkage from economic modelling to financial modelling.

Aspect	Economic model is:	Economic model is not:
Purpose	To enable rapid exploration of different strategic options and scenarios to support strategic decision making (this aims to enable councils to evaluate the merits of a strategic, "regional water delivery entity" option).	Designed to support more detailed tactical decisions. For example, detailed, accurate pricing of specific services or detailed investment plan (this level of modelling detail would be undertaken in the establishment phase of a WSCCO).
Level	Strategic, macro model.	Tactical, micro model.
Timeframe	30+ years.	Short-term financial model (noting that a financial accounting perspective of the first 10-year horizon is included in Appendix J.)
Inflation	Using real numbers. This makes comparisons clearer and underlying trends more transparent.	Using nominal, inflated numbers (but the report provides a set of 10-year financial projections which incorporate inflation in Appendix J.)
Accuracy	Targeting +/-20% around revenue, investment, debt etc over the 30-year period, i.e. a sufficient level of accuracy for strategy decision-making purposes (note modelling used the "best available data and assumptions". Some of these,	Not intended as the basis for investment decisions but is intended to inform scenarios that investment planning can be based upon.



	such as the available asset condition metrics, are known to be weak ²).	
Investment	Calculating top-down investment "envelope" required by main category (sustaining, catch up, growth, compliance).	Bottom-up project by project build-up of a detailed Investment or Asset Management Plan.
Price	Calculating aggregate "Revenue Requirement" and revenue path (rather than price for a specific service).	Designed to calculate prices for specific services, specific regions etc.
Averaging	Averaging costs over long-term timeframes, e.g. 20 - 30 years for sustaining or catch-up period.	Designed to provide finely phased figures that factor in ramp-up periods and inconsistent levels of investment for major projects.

² Refer to Appendix C for assumptions

Appendices to final report: Recommended Wellington regional approach to a joint WSDP and delivery model 40

Economic & Financial Modelling - Approach





Model Overview – 10 Year Financial Projection Model





Average Price **Headline Metrics** \$5,000 Average Price \$4,239 ····· Yr1 LTP Average Price Cash Use \$4,000 \$4,239 Yr3 LTP Average Price \$1,700m -Long Term Sustainable Average Price \$1,600 Faults Cost \$3,000 \$1,500m \$2 596 Ganwh costa \$2,596 \$1,400m Clean Up cests Catch Up Renewel cost \$2,000 \$1,300m Kamp Up Renewal posts \$1,711 \$1,200m \$1,711 600 \$1,000 \$1,100m \$1,000m EBITDA Ex Faulta \$900m 26 53 \$800m Compliance Complete ··· Excess Debt Repair \$700 Debt Debt \$600m \$12 \$500m \$11br Closing Deb \$4007 \$10m -Max Dett @ 9.0% FFC ratio \$300m SSkin Peak Debt Şâbri \$200m LTP FY27 Closing De \$100m \$7bn Debt to Revenue \$6bm Maximum of 5.0 Debt/Revenue rate 31 33 35 37 39 41 43 45 Year 47 A9 51 53 55 57 \$5bn \$4bm 3,006 \$3bn \$2b \$1b Long-term average sustainable price \$2,596 in 2051 ~2035-2050 27 29 31 33 35 37 43 45 47 49 Peak average price \$4,239 \$3.0bn 2032 Peak debt Cumulative probability of one or more critical (1in200yr) failures over remediation period 70.0% Peak credit limit shortfall \$0.0bn 60.0% 55.0% Network fixed 2045 50.0% Network self funding 2033 40.0% 2050 Debt repaid 30.0% Network investment costs 74% 23% Interest costs 20.0% Faults costs 3% 13.9% 10.0% Network critical failure risk increase 55% vs 13.9% 0.0% 75 78 27 28 29 30 51 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 59 39 65 61 52 53 Van

Scenario Baseline: 9% pa (all values are in \$FY24)





Scenario 1: 25% yr4 price rise, then 9% pa (all values are in \$FY24)



Scenario 2: 5% pa price rise (all values are in \$FY24)







Scenario 3: 30yr network recovery, 9% pa price rise, reduced peak funds (85%) to lengthen remediation period (all values are in \$FY24)





Scenario 4: 20% increase in cost, +9% pa price rise (all values are in \$FY24)





Scenario 5: 20% decrease in cost, +9% pa price rise (all values are in \$FY24)





Scenario 6: \$120m fault cost, 9% pa price rise (all values are in \$FY24)





Scenario 7: Increased opening Debt (+\$500M), 9% pa price rise (all values are in \$FY24)





Scenario 8: Consolidated Council LTPs: 9% price rise (all values are in \$FY24)



Appendix J: Financial projections

This section outlines the 10-Year financial projections. The financial projections assume that the new entity comes into operation on 1 July 2027 (start of Year 4). As noted in the body of the report, this may in fact be earlier, from early 2026 with a staged implementation approach.

The first three years of the financial projections are taken from councils' final adopted 2024 Long-term Plans (LTPs). The following seven-year figures are the financial projections for the new entity based on the 9% pa price scenario set out in the Financial Sustainability section.

Forecast Profit & Loss Account (P&L)

Table 8 sets out the forecast 10-Year Profit & Loss account. This is based on the Key Financial Assumptions detailed in below. The salient points to note are:

- 1. Nominal the figures in the Profit & Loss account are shown in nominal (inflated) dollars.
- 2. **Revenue** is based on the revenue levels set in the final adopted 2024 LTP for the first three years and an average annual price increase of 9% is applied from Year 4 (2027/28) onwards (after adjusting for growth and inflation).
- 3. **Expenses** we have not factored in any efficiency savings. Rather, the assumptions are that (i) any efficiency savings will be sufficient to fund the continuous improvement projects one would expect a business to invest in each year and (ii) any efficiency savings above that will be used to accelerate the speed of rectifying the renewals backlog.
- 4. Funds from operation (FFO) and surplus as discussed in the Financial Sustainability section, with the 9% pa steady price rise it takes until 2033 for FFO to be sufficient to cover the c\$550 million pa capital investment (\$ quoted in real terms here). The surplus reflects this situation.
- 5. **Explanation for dynamic** the shortfall is the result of the inherited revenue streams being significantly short of the amount required to fund the required level of investment. Hence, the rise in revenue needs to be sufficient to close the gap and to fund the rapidly increasing interest burden arising from the debt used to fund the gap until the price path catches up.
- 6. **Establishment costs** at this stage, we have not factored in any of the operational or capital investment required to establish a new entity. The Transition section below provides a rough indication of potential establishment costs.



Profit and Loss Account, 3- and 10-Year Summary (\$m)										
	24/25	25/26	26/27	27/28	28/29	29/30	<u>30/31</u>	31/32	32/33	33/34
Revenue ³	460	518	620	697	782	875	982	1,098	1,227	1,372
Expenses	364	378	426	465	488	507	521	560	561	559
Staff ⁴	-	-	-	109	112	114	117	120	122	125
less Capitalised labour	-	-	-	(45)	(46)	(47)	(48)	(49)	(50)	(51)
Maintenance	-	-	-	71	73	75	77	78	79	81
Operations	241	246	272	80	82	84	86	88	87	89
Monitoring & Investigations Other – digital,	-	-	-	41	42	44	46	48	49	50
insurance, property, admin etc	38	42	50	78	82	84	86	88	90	92
Integration & Efficiency Initiatives	-	-	-							
Interest	85	90	105	131	143	153	158	188	183	174
Funds from Operations	96	140	194	232	293	369	461	538	666	813
Depreciation	241	249	270	277	288	313	324	336	363	371
Net Surplus/(Deficit)	(145)	(109)	(76)	(45)	6	56	137	202	303	442

Table 13 – Profit and Loss Account, 3- and 10-Year Summary

An explanation of each of the line items follows below. The explanations focus on the composition of the Year 4 figures, being the first year of the new regional entity's operation. Given the stable nature of the business, the composition of the subsequent years figures is very similar with inflation being the main reason for the year-on-year change.

Revenue (\$685 million): The revenue figures comprise a blend of rate and service fees (refer to the chart below). The water rating revenues equate to a cost of approximately \$2,003 per residential household and \$5,025 per business (excluding GST) based on current council rating differentials. The core targeted rates, general rates and fee revenues streams are relatively stable. Grants are more volatile.

Underlying the revenue streams are a very diverse and fragmented range of service and pricing structures inherited from the 10 legacy councils. A key task for the new entity will be to simplify and rationalise the service, pricing & tariff structures. This will be an essential foundation for enabling customer transparency and rebalancing revenues to sustainable levels which reflect the cost to serve.

Staff expenses (\$109 million): The staff expenses are based on the detailed organisation structure which was designed for the regional entity during the Three Waters programme (Entity G). The design has been adjusted to back out roles no longer required under the new legislation



and to add in roles from Horowhenua District Council. The total headcount of the new organisation design is 727. This is an increase of 143 (11%) new roles on the roles transferring in from councils and WWL. The main drivers behind the increase are roles to furnish new capabilities for: (i) the new regulatory regime; (ii) retail customer billing/support; and (iii) additional corporate support capacity. The additional corporate

³ Revenue excludes capital contributions (e.g. development contributions). These are accounted for and discussed in the Capital and Funding sections below.

⁴ Staff costs of temporary people (\$0.8m) employed to work on initiatives are included in the initiative costs line, not the staff cost line.



support capacity is required because, while significant operational staff would transfer from councils, hardly any corporate/customer staff would transfer.

Some parts of the organisational structure are driven by the need for some extra support in the "frenetic" early years. Accordingly, there will be opportunities to streamline some areas of the organisation structure as the organisation matures and staff turnover.

Maintenance expenses (\$71 million): The main components are planned maintenance (\$22m), reactive maintenance (\$46m) and general maintenance such as plant & equipment maintenance (\$3m). The high level of reactive maintenance reflects the ageing network. This is a significant opportunity to improve efficiency as the entity ramps up sustaining maintenance and remediates backlog renewals.

Operations expenses (\$80 million): The major components of these expenses are general operations costs (\$55m); consisting of work such as leak detection, backflow prevention, land disposal, costs associated with the new sludge minimisation facility operations, power (\$17m), compliance costs, chemicals (\$6m) and operating technology (\$2m).

Monitoring and investigation expenses (\$41 million): The main components here are: investigations (\$11m), asset management improvements (\$9m), strategic planning (\$2m), sampling and monitoring (\$5m) and other general operational planning and investigation work (\$14m) such as carbon management, hydraulic modelling, universal water meters business case, growth planning and modelling, seismic and resilience assessments, water conservation, and facility management plans.

Efficiency: The cost base included in the P&L is high compared with comparative water businesses (refer Appendix J). There are a number of areas which should be targeted for efficiency improvement as the organisation stabilises. As noted above, we have not factored in any efficiency costs at this stage. Rather, we assume that any efficiency savings will be reinvested in continuous improvement initiatives and to accelerate the remediation of the renewals backlog.

Other expenses (\$78 million): The main components of other expenses are professional services (\$12m), insurance (\$15m), rates expense (\$15m), digital services (\$19m), telecommunications (\$1m), other operating costs such as rent, doubtful debts, security, vehicle costs, community engagement (\$10m), and administration costs (\$6m), including Commerce Commission and Taumata Arowai levies.

Interest expense (\$131 million): The interest expense rises steeply as a result of higher interest rates and high debt driven by:

- \$2,273 million inherited from Councils on 1 July 2027
- \$536 million pa debt required to fund average capital expenditure in first three years of the new entity.

Note: Watercare does not capitalise interest and it is assumed that the WSCCO would also adopt this stance.

Operating cashflow (\$240 million): The funds from operations improve significantly driven by the increase in revenue.

Depreciation expense (\$232 million): Depreciation is currently based on assumed asset lives and the latest council revaluations. A full revaluation will be undertaken on acquisition. The actual asset lives will also be available on acquisition. Both of these actions will result in some change to the asset and depreciation figures.

Net surplus/deficit (\$45 million): The deficit primarily reflects the revenue shortfall as previously discussed, along with the "full" costs resulting from the entity being a standalone, fully-fledged utility (for example, having its own billing systems, finance systems, paying regulator fees, paying rates etc).

Sensitivity and risks: There is still a relatively high level of uncertainty surrounding a number of the assumptions and figures. The main uncertainties are summarised in Table 14 below. The key assumptions are set out in Appendix C.



Table 14 – Risks and sensitivities

Risks and sensitivities (\$m)							
Item	Level of Uncertainty	Comment on major risks					
Revenue Operating Income	High (>\$10m)	May be a rationale for choosing a different % price increase than the 9% placeholder.					
Capital Income	<mark>Med</mark> (<\$10m)	Forecast prices for DCs may change depending on final capex profile and population growth forecasts.					
<u>Expenses</u>							
Staff	Low (<\$4m)	The forecast assumes that all roles are full-time equivalents. Potentially, some roles may be part-time. The cost would reduce accordingly.					
Maintenance	Low (<\$4m)	The forecast is based on WWL's forecast budget for Year 1 of the 2024 LTP for WWL shareholding councils with a 15% uplift for Carterton, Kāpiti Coast, Masterton and Horowhenua based on historical portion of spend between the councils. The final costs may be less than forecast.					
Operations	<mark>Med</mark> (<\$10m)	The forecast is based on WWL's forecast budget for Year 1 of the 2024 LTP for WWL shareholding councils with a 15% uplift for Carterton, Kāpiti Coast, Masterton and Horowhenua based on historical portion of spend between the councils, plus provision for power costs of \$16 million that are currently paid by councils (not included in WWL forecasts). The final costs may be less than forecasted. The only consequential opex costs factored in are for the new Sludge Minimisation Facility.					
Planning & Investigations	<mark>Med</mark> (<\$10m)	The forecast is based on WWL's forecast budget for Year 1 of the 2024 LTP for WWL shareholding councils with a 15% uplift for Carterton, Kāpiti Coast, Masterton and Horowhenua based on historical portion of spend between the councils. The final costs may be less than forecasted.					
Other	<mark>Med</mark> (<\$10m)	Uncertainty about \$15 million rates expense forecast. Have budgeted based on the CV-forecast from the Three Waters programme. It assumes that only 70% of land will transfer (Watercare %), but actual costs may be higher or lower.					
Interest	<mark>Med</mark> (<\$10m)	Uncertainty is low for interest rate, but medium for quantum of debt. Approx \$5.47 million interest per \$100 million of capex/debt.					
Depreciation	<mark>Med</mark> (<\$10m)	Dependent on capex profile and still based on estimated useful lives for assets rather than actual.					

Forecast 10-Year capital investment and funding requirements

The forecast 10-Year capital investment, funding requirements and associated funding metrics are shown in Table 15 & Figure 3 below. They reflect the proposed investment and funding strategy set out in the Financial Sustainability section. As noted earlier, they (1) are based on nominal, inflated figures; and (2) exclude the capital investment costs required to establish a new entity.

Table	15 – Summary	3- and 10-Year	Investment Plan an	d Funding Requirement
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Summary 3- & 10-year investment plan and funding requirement (\$m)										
	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>
Current Infrastructure Projects	;									
Renewals	201	220	222	-	-	-	-	-	-	-
Кеер ир				246	255	264	274	283	292	302
Catch up				77	75	73	70	67	63	139
Clean up				30	31	32	32	33	34	39
Levels of Service	268	242	161	-	-	-	-	-	-	-
Digital	-	-	-	18	19	19	20	20	21	21
Sundry (e.g. property)	-	-	-	2	2	2	2	2	2	2
Total Current	469	462	383	374	382	390	398	405	412	503
Growth Projects	121	117	136	148	154	160	165	171	177	183
Total Capital Spend	590	579	518	522	536	549	563	576	589	686
Funded By:										
Capital income	166	208	105	56	31	40	50	47	59	31
Funds from Operations	96	140	194	232	293	369	461	538	666	813
Debt	328	231	220	234	211	140	52	(8)	(136)	(158)
	590	579	518	522	536	549	563	576	589	686





Figure 3 – Summary of debt level vs investment vs price



Appendix D: Council profiles

The following pages provide an overview of water service delivery for each council. These overviews were initially prepopulated with information from the Entity C working draft asset management plan appendix A, the AECOM Asset Management Plans, council websites, and the Long-term Plans. Councils reviewed the prepopulated information and corrected or updated where possible*. The table below summarises the sources of information for each section.

Section	Information source	Notes
Council overview	 Council websites, reviewed and adjusted by council staff ArcGIS, Statistics NZ WWL Stormwater Management Strategy 	
Population	 The Wellington Regional Leadership Committee regional dashboard Census 2023 	
Projected population for 2054	The Wellington Regional Leadership Committee regional dashboard: <u>WRLC Housing Data</u>	
Water asset information	AECOM Asset Management Plan V1.0	Note that Kāpiti Coast District Council provided updated information from 2024 Asset Management Plan.
Water asset condition	 AECOM Asset Management Plan V2.0 WWL Addendum supplied as part of the MVP Asset Management Plan material for the 2024-34 LTP 	• Note that Kāpiti Coast District, Hutt City, Masterton District and Greater Wellington Regional Councils provided updated asset condition information.
Water challenges and projects	Largely from AECOM Asset Management Plan V1.0, some councils provided additional information out of LTPs	Note that Kāpiti Coast District Council provided updated information from 2024 Asset Management Plan.
Compliance issues	Entity C working draft AMP council summaries were used as the base with updates provided by councils	
Planned pipe replacement	 All information provided by councils 2024-34 Investment Planning and Advice, Porirua City Council 	

* Note – no information was received from Carterton District Council.

Appendix D: Council profiles, from the report: Recommended Wellington regional approach to a joint WSDP and delivery model





ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024




ater chal	lenges and projects			Compliance	issues
VDe	Key water risks, issues and challenges for the next ten years	Туре	Top priority projects / key planned investments in water for the next ten years		DRINKING WATER
W general	Ageing infrastructure – treatment plants like the Levin Wastewater Treatment Plant.	3W general	 Any activities concerning Lake Horowhenua (Punahau). This is a community asset and culturally significant. An unwavering commitment has been made with iwi and stakeholders to restore the mauri of the wai. 		STANDARDS
	 Resilience in managing aging infrastructure during a natural disaster. Growth predictions impact infrastructure capacity. Climate change – increased weather events and stormwater impacts on wastewater infrastructure. Data quality and reliability, including assumed condition. 	Water services	 Levin Installation of state of the art Water Demand Management system. Foxton Installation of steel reservoir (500m³) in 2018 at the Foxton Water Treatment Plant. Removal of manganese in sand filters at the Foxton Water Treatment Plant in early 2017 to supply aesthetically acceptable water to consumers. 		
/ater ervices	 Ageing infrastructure of water supply assets. A major challenge Council faces is securing a sustainable source of water supply for growth, specifically in Levin. There are quantity issues that need addressing to ensure Council can secure water supply to existing and future communities. 		Foxton Beach Installation of green sand filters in Foxton Beach water treatment plant in 2017. Tokomaru Construction of new timber reservoir (200m ³) in 2017 to increase the total storage capacity of the treated water to 677m ³ . Other Further improvement work on Water Demand Management in Levin, Shannon, and Foxton areas but not Foxton Beach		
/astewater	 A major challenge is the increasing age of Council's wastewater assets especially within the Levin reticulation and treatment plant. Poor pipe condition is a major cause of groundwater infiltration which adds unnecessary volume to the amount of wastewater collected during wet weather events. Meeting with growth demand. Anticipated growth is leading to increased residential, commercial and industrial demand. Sludge treatment and disposal over recent years been challenging for Council including the 		 Increasing water storage capacity in Levin. Finding an alternative water supply source for Levin, including a supplementary sustainable water supply. The requirements for a reticulated water supply to growing smaller settlements, such as Waitärere Beach and Öhau, which will only be considered once a long-term water source for Levin has been secured. Strategic upgrade of the Levin Water Treatment Plant to increase capacity of the clarifiers, filters, and chemical dosing plant, increase treated water storage capacity and to improve the backwash water process and re-use. The Levin (Poads Road) Water Supply Reservoir – build a new large-scale water reservoir. Roll out the water meters project. 		 WASTEWATER STANDARDS Abatement Notice 1428 – Tokomaru Wastewater Workin, Party – non- compliance. Capacity to meet consenting conditions is limited
tormwater	increased cost for disposal. Resource consent process and complying with consent conditions can be expensive, particularly with increased expectations from the public and stakeholder groups. Localised flooding and drainage issues.	Wastewater	Levin Wastewater Treatment Plant upgrades. Plant Inlet and Headworks. This is required to increase hydraulic capacity at the head of plant, reduce grit carryover to downstream systems, prepare for future upgrades, and tie in with planned work such as the septage screening facility and new inlet line. Sludge Dewatering Plant. This is required due to lack of capacity, resiliency, and excessive operating demands.		
	 Stormwater quality issues especially around Lake Horowhenua (Punahau). Another challenge faced by Council is that the quality of freshwater in streams, river systems, and water catchments in general is affected by water runoff, erosion, and contaminants (whether chemical or solid waste) which can be present in stormwater. 	Stormwater	Sludge Balance Tank. The sludge balance tank has been identified as structurally unsound. Extension and reconsenting of irrigation of treated effluent. District wide stormwater improvement works. Including: Foxton Drainage Resilience Project Foxton Beach Global Consenting Program Lake Horowhenua Master Plan Levin Stormwater Consents projects Makerua Drainage Scheme		STANDARDS





MASTERTO

DISTRICT COUNCIL



/ater challer	nges and projects		Compliance issues
Гуре	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years	
3W general	 Meeting population growth demand - growth - capacity. Climate change impacts. Affordability of levels of service - funding. Seismic hazards. Government changes to three waters services. Regulatory changes. 	 Developing long term solutions with lwi partners. Water treatment plant resilience programme. Strategic water supply network and storage upgrades. Wastewater treatment plant consent renewal and treatment plant upgrades. Wastewater septage reception facility and strategic network upgrades. Prioritised stormwater network upgrades programme. 	
Water services	 Extension of existing water supply network to unserved rural areas. Compliance to meet new regulatory requirements. Waitua Recommendations (Impacts on Water Allocation). 	 Treatment plant resilience upgrades – Waikanae, Õtaki and Hautere. Õtaki reservoirs. Strategic Network Upgrades. 	WASTEWATER
Nastewater	 Resource consents for Paraparaumu wastewater treatment plants expired in 2022. Application for renewal of consent submitted in Dec 2021. Proposed upgrades likely to meet future consent requirements. Iwi partners' support for developing long-term, sustainable delivery. The rise of the water table. Condition data for linear network assets. Waitua Recommendations (Impacts on Wastewater discharges). 	 Wastewater consent renewals. Proposed treatment plant upgrades both at Õtaki and Paraparaumu. Wastewater network emergency storage pond lining completed. Inlet works upgrade, concept design complete. To develop long-term sustainable solutions with iwi partners. Septage collection facility. Strategic Network Upgrades 	STANDARDS Standards Standards Scuring new consent for the Paraparaumu Wastewater Treatment Plant Increasing nitroge levels in the discharge from the Otaki Wastewater
tormwater.	 Flood hazards in 30% of urban properties. 50% of piped network is under capacity for a 1:10 year event. 30-40% cost increases impacting on what can be delivered. Inflow infiltration issues. Privately owned SW assets (ponds, soak pits, down pipes etc.) not maintained. Increased urbanisation (Intensification). Emergency response. Open drain/stream maintenance. Waitua recommendations. 	 Major projects assets upgrades and renewals programme. Minor projects assets upgrades and renewals programme. IAF Õtaki Growth Project – ANZAC Road stormwater upgrades. IAF Õtaki Growth Project – Rangiuru Road stormwater upgrades. 	STORMWATER STANDARDS • Securing the renewal of the global stormwater discharge consen







Water service delivery in the Wellington region – Porirua City Council poriruacity Water challenges and projects **Compliance issues** Key water risks, issues and Top priority projects / key planned investments in water for the next ten challenges for the next ten years **DRINKING WATER STANDARDS** Туре years 3W general Significant and growing renewals For drinking water, we will continue with our plan to install residential water backlog in water and wastewater due meters. This will help identify where our major leaks are, so they can be fixed. to age profile of pipe materials. It will also help raise awareness around water usage. Population growth is ahead of three For wastewater, we will continue to support Kainga Ora's significant Bothamley Park project. We will also continue the Central City Storage Tank and the Know waters infrastructure. Your Pipes initiatives (where we help identify wastewater leaks - mostly on private pipes). These initiatives will lead to better sanitation and environmental outcomes, particularly for the health of our harbour. · There is limited capacity for investment in stormwater. So, our approach here is to improve our modelling and identify where to invest our limited resources, to combat the more intense flooding and slips we anticipate from more intensive weather events. · Projects that improve the health of Te Awarua-o-Porirua Harbour are a priority for Te Rūnanga O Toa Rangatira and Porirua City Council. WASTEWATER STANDARDS Some overflows during storm events Water services Water demand for Porirua City is Universal metering (smart network). outstripping supply due to water loss Low level (Aotea) reservoir. in the network and growth. Networks are not optimised in accordance with · Whitby high-level trunk water main. Te Mana o te Wai. The condition of our reservoirs makes them vulnerable to contamination. Wastewater • The Council is reliant on landfills Wastewater network overflow consents. accepting sludge from wastewater Wastewater treatment plant consent renewal. treatment plants. • Paremata Wastewater Trunk Upgrade Stage 2. STORMWATER STANDARDS Porirua Central City wastewater storage tank. None (some overflows during storm events) Stormwater Streams, rivers and harbours contain Stormwater consents. coliforms and other contaminants Taupo Stream stormwater catchment improvements. e.g. heavy metals and microplastics. · Karehana stormwater catchment. · Commit to the health of Te Awarua-o-Porirua Harbour and its catchment through investment, advocacy and regulation. **Planned pipe replacement** 15km of pipe renewals are required per year for 30 years to address the current backlog







Water challen	ges and projects		Compliance	issues
Туре	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years	H	DRINKING WATER STANDARDS
3W general	 Significant and growing renewals backlog in water and wastewater due to age profile of pipe materials. Population growth is ahead of three waters infrastructure. 	Fix water infrastructure and improve health of waterways.	Ű	
Water services	 Water demand for Wellington City is outstripping supply due to water loss in the network and growth. Reservoirs condition means they are vulnerable to contamination. 	 Seismic improvements at Wrights Hill drinking water reservoir. Critical assets reservoir water quality renewals (all 64 water reservoirs identified as very high criticality assets). Investigate and install water meters. Reactive maintenance to clear the backlog of leak repairs in Wellington before summer 2024/2025 		
Wastewater	Moa Point condition is leading to ongoing compliance issues.	 Renewals of critical wastewater assets at Moa Point and Western Wastewater Treatment Plants. Remedial work on Karori effluent pipelines. Eastern Trunk Wastewater Main, stage 1 cargo area pipe. Airport wastewater interceptor contingency pipe. CBD Pump Station 01-07 rising main replacement including Taranaki Street Pump Station. 		WASTEWATER STANDARDS • Moa Point condition is leading to ongoing compliance issues.
Stormwater	 Our streams, rivers and harbours contain coliforms. Coastal stormwater outfalls experiencing sea level risk resulting in increased sedimentation and need for more frequent clearing. 	Prioritise investment in stormwater filtration and flood protection in conjunction with or ahead of transport infrastructure investment.		
	Planned pipe 194kms of pipes to be repl	e replacement		STORMWATER STANDARDS







Water service delivery overview - Hutt City Council HUTT CITY Water challenges and projects **Compliance** issues **DRINKING WATER STANDARDS** The Waterloo Water Ш 3W general In summary, despite the increasing investment Council has and will make in water network renewal, current 1. Address ageing water infrastructure: Treatment Plant is nonwater storage constraints as well as capacity constraints in the regional water infrastructure workforce will Three waters network renewals. compliant with bacterial impact the level of increased system and network capacity that can be achieved in the short to medium term. compliance rules around Seaview Wastewater Treatment Plant In combination with the need for Council to operate with fiscal prudence, this means there are two potentially chlorine contact time. renewals unavoidable future risks: which affects around 700 households. Petone Stormwater improvements. • The likelihood of ongoing and potentially increasing water shortages across the Wellington Region. While this issue does not affect drinking Petone Collecting Sewer renewal. · Council will be unable to provide infrastructure support in all areas of housing development or renew water safety, work is currently underway ageing water infrastructure on a lifecycle basis in Te Awa Kairangi ki Tai. 2. Meeting growth demand to achieve compliance by reconfiguring Our greatest water infrastructure challenge is a rapidly ageing water network. Council's strategic approach to Eastern Hills Reservoir and outlet main. the network. investing in water infrastructure, namely: Implementing universal smart meters. · Keeping the water in the pipes by investing in finding and fixing leaks, managing water loss, and replacing 3. Building network resilience ageing infrastructure Black creek stormwater improvements. · Minimising the future cost of water infrastructure by exploring ways of reducing the demand for water and influencing water use behaviour. WASTEWATER · Building additional water storage capacity. **STANDARDS** The Seaview Wastewater Water · Water supply reliability over summer is at risk and a new water supply is needed. Approximately 60km of pipe renewal has been planned for the next 10 years in the LTP. Treatment Plant has services · Reservoirs condition means they are vulnerable to contamination. had recent issues New water reservoir on Eastern Hills planned Water demand for Hutt City is outstripping supply due to water loss in the network and growth. with a failure to comply with both to meet growth and improve resilience. Current 10-year LTP investment is well short of what is required to renew ageing parts of the network water effluent and air quality consent (estimated that only 50% of what is required). requirements, largely due to ageing 109kms of galvanized water pipe that is failing and requires urgent replacement along with significant plant and equipment. A major capital amount of AC pipe that is failing earlier than expected. renewals programme over the next three years has been included in the LTP to Wastewater Current 10-year LTP investment is well short of what is required to renew ageing parts of the network Investment of over \$200m is earmarked overcome these issues. (estimated that only 10% of what is required). for renewing much of the working plant and equipment at the Seaview Wastewater Main outfall pipe working at around 50% capacity needs renewing or upgrading with no budget provision Treatment Plant over the next 1-5 years. The for physical works expected to be around \$700m. sludge dryer is the most significant of these Erosion occurring on the Hutt River potentially undermining 825mm bulk wastewater pipeline adjacent expected to cost \$85m. Taita rock STORMWATER · Sludge dryer at Seaview WWTP is nearing end of life. **STANDARDS** · The redundancy of Seaview WWTP is inadequate for major maintenance while ensuring compliance can be met. Approximately 10km of pipe renewal has been Stormwater Streams, rivers and harbours contain coliforms. planned for the next 10 years in the LTP. · Coastal stormwater outfalls experiencing sea level rise resulting in increased sedimentation and need for more frequent clearing. Growth Study notes that approximately \$800m of investment is required to upgrade stormwater across the City to meet growth and achieve target standards. This is not currently funded. Planned pipe replacement Renew approximately 175kms of pipe network over the next 10 years



e Kaunihera o Te Awa Kairangi ki Uta Upper Hutt City Counc



Water service delivery overview – Upper Hutt City Council

- Upper Hutt enjoys the character of a small city, while having the second largest land area of a city council in New Zealand. Easy access to an expansive natural environment featuring Te Awa Kairangi/Hutt River, regional parks and hills surrounding the city is part of our identity.
- Upper Hutt is a family-oriented city, with spacious suburban housing development occupying around 3.24% of the land area, encompassed by treasured open spaces. Traditionally a commuter city with over half of the people working outside the city, the local economy is growing and diversifying including new commercial developments and niche industry hubs.
- Upper Hutt encompasses an area of 54,000 hectares
- 5 major waterways The Whakatikei, Akatārawa, Pākuratahi and Mangaroa rivers feed Te Awa Kairangi/Hutt River, which flows into Te Whanganui-a-tara Wellington Harbour.



• Projected population of 64,238 for 2054.



Water asset information (current state)



281km of water supply mains 226km of wastewater pipes 155km of stormwater pipes

TREATMENT ASSETS

 All wastewater is collected and treated via the Hutt Valley joint venture system. Water is supplied via a bulk water main from treatment facilities owned by the Greater Wellington Regional Council





Water asset condition (current state)





Vater challeng	es and projects		Compliance issues
Туре	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years	DRINKING WATER STANDARDS
3W general	 Significant and growing renewals backlog in drinking water and wastewater. New environmental quality standards require very high investment to achieve wastewater and stormwater consent compliance. Population growth is ahead of three waters infrastructure provision. Major investment is needed, especially in the wastewater network to enable growth to occur. 	 Critical assets: 7 pump stations Our pipes are critical assets in the three waters network approximately 661,700 metres of which around 40% (by length) need replacing in the next 30 years to keep the network operating. Due to the size, type and age of pipes, the wastewater pipe network renewals are the most critical focus area. 	
Water services	 Water demand and use is outstripping supply due to water loss in the network and growth. As a bulk water purchaser, Council is a cost and service taker with limited influence over these aspects. 	 Critical assets: All 16 reservoirs have been identified as high criticality assets and based on condition some require a level of short-term remedial works. All planned water reservoir upgrades and renewals. New storage to address level of service deficits and to enable growth. Pipe renewals. 	WASTEWATER STANDARDS
Wastewater	 Major shared assets need upgrades, including sludge dryer at Seaview WWTP nearing end of life. Network infiltration and inflows. Wet weather overflows. 	 Critical assets: 2km wastewater pipes Wastewater network overflow consents and subsequent improvements. Hutt Valley shared asset projects including bulk sewer interceptor improvements (at Petone) and Seaview WWTP and outfall upgrade. Pipe renewals 	
Stormwater	Contamination and overflows into waterways.	 Critical assets: 24km stormwater The Pinehaven Stream Improvements Project. Global stormwater consents and subsequent improvements. 	STORMWATER STANDARDS
	Planned pipe replace	ement	







Гуре	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years	DRINKING WATER STANDARDS
3W general	 An ageing network results in asset failure and requires an increase in renewal. Population growth is ahead of three waters infrastructure. Emissions from three waters are not reducing. 		
Water services	 There is a lack of redundancy in critical systems (source, treatment, network) to provide safe drinking water in accordance with the Water Services Act. Featherston / Greytown / Martinborough water system resiliency is compromised due to poor condition of assets. Boar Bush Gulley Road and Boar Bush reservoir and inlet/outline pipe scour damage. 	 Featherston security of supply – single compromised pipeline (Tauherenikau). Featherston Waiohine WTP Stage 3 upgrades. Martinborough Water Treatment Plant – New water source upgrade. 	
Vastewater	 Inability to comply with resource consents. Condition and resiliency of the Martinborough / Featherston wastewater networks is deteriorating. Featherston wastewater network has very high inflow of groundwater. No new wastewater connections are available in Martinborough or Greytown. 	 Martinborough WWTP compliance upgrade programme. Featherston WWTP – Major plant upgrade - Stage 2. Greytown WWTP stage 2 of land disposal programme upgrades. Featherston pipe renewals – rising main. 	WASTEWATER STANDARDS
Stormwater	 Streams and rivers contain coliforms. Flooding. 	 Stage 1 global stormwater consents. Stormwater flood modelling. Infiltration and Inflow modelling and investigations, particularly Featherston. 	
	Planned pipe replaceme To be confirmed		STORMWATER STANDARDS





Water service delivery overview - Masterton District Council

REPLACEMENT VALUE

Combined replacement value \$390m

Horowhenua Kāpīti Coast Masterton Porirua Upper Hutt Carterton Wellington Hutt South Wairarapa



1 water supply boost

13 wastewater pump

pump station

stations

MASTERTON

DISTRICT COUNCIL



/ater challenges	s and projects		Compliance issues	
Туре	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years	DRINKING WATER STANDARDS	
3W general	 Meeting population growth demand. Resource consent renewals. Climate change impacts. Affordability of levels of service. 		Treatment plant monitoring regime in place.	
Water services	 Raw water storage dam construction. Trunk main renewals. Meet compliance with new regulatory requirements. Improve supply pressure in some suburbs. Increase treated water storage. Transition to charging by metered usage. 	 Water storage dam (raw water) and additional reservoir. Water Trunk Main replacement. Reticulation renewal programme. 	WASTEWATER STANDARDS Significant compliance	
Wastewater	 Understanding current state. Resource consents for Masterton Wastewater Treatment Plant expire in 2034. Upgrades will need to meet new consent requirements as per NPS Freshwater – which are uncertain. Network capacity, ingress and infiltration reduction. 	 Sewer reticulation renewals (ingress and infiltration reduction). Homebush land-based irrigation system upgrade. 	requirements relating wastewater treatmen land disposal and discharge to river (Homebush).	
Stormwater	 Areas of flooding across the district. History of extreme weather events. Consideration of increasing design standards to meet climate change challenges. 	Enhanced operations and maintenence for stormwater to prevent localised flooding.		
	Planned pipe replacement Stormwater 6km in 10 years (0.6km/year) (new and renew Note – there is very low confidence in the long term spend profile and needs re The expenditure required is expected to be significantly higher than rei Work is under way at present to attempt to quantify this but it will take Water 24km in 10 years (2.4km/year) Wastewater 20km to 30km in 10 years (2km to 3km/yea	vals) elating to stormwater. flected in LTP. e some time.	STORMWATER STANDARDS Global stormwater consent. Compliance with to be determined.	







	es and projects		Compliance issues
Гуре	Key water risks, issues and challenges for the next ten years	Top priority projects / key planned investments in water for the next ten years	DRINKING WATER STANDARDS Currently, water
W general	 An ageing network results in asset failure and requires an increase in renewal. Population growth is ahead of water infrastructure. Water demand for the metropolitan councils is outstripping supply due to water loss in the network. Current demand is highlighting that GWRC may not be able to meet its duty of care obligations as an asset owner under the Water Services Act in the long term. Waterloo Treatment Plant is subject to liquefaction in the event of high ground shaking. 		Supplied from the Waterloo Treatment Plant is not compliant for up to 800 Lower Hut households.
Vater services	 Current demand is placing the existing assets at risk due to lack of headroom to allow major assets to be taken off-line, compromising the resilience of the bulk water supply. Maintenance and replacement of bulk water meters, treatment plant clarifiers and reservoirs are examples of the issues. Seismic resilience of the bulk water assets does not meet the required earthquake resiliency standard for ensuring provision of safe drinking water following a significant earthquake event. The system is not yet able to reliably meet regulatory requirements for fluoride due to lack of redundant systems and asset reliability. Waste stream at Wainuiomata Water Treatment Plant lacks redundancy and capacity. A failure of the plant, prior to completion of Wash Plant Capacity and Quality Upgrade in 2031/32, would impact the performance of the Water Treatment Plant and would eventually cause failure of provision of water. 	 Kaitoke main on Silverstream Bridge. Te Marua WTP Capacity optimisation. Kaitoke Flume Bridge. New Gear Island and Waterloo Wells – Part 2+3. Water Storage Lakes (Te Marua Water Treatment Plant Scheme Expansion Stage 1 (Pakuratahi Lakes 1 and 2) – Pre-construction). Regional Fluoridation Improvement Stage 2. Relocation of Te Marua/Ngauranga pipeline. Wainuiomata Water Treatment Plant – Washplant Capacity and Quality Upgrade. Wellington Metro Water Treatment Plant Planned Renewals (Continuous programme). Water Supply Pump Station Renewals. 	WASTEWATER STANDARDS Not Applicable.
Vastewater	Not Applicable.	Not Applicable.	STORMWATER STANDARDS
tormwater	Not Applicable.	Not Applicable.	





Peer Review of Wellington Region Water Network Modelling

Report to Councils in Wellington Region

October 2024

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Table of contents

 9 10 14 16 17 19 20 21 22 24 25 26
 10 14 16 17 19 20 21 22 22 24 25 26
10 14 16 17 19 20 21 22 22 24 24 25 26
14 16 17 19 20 21 22 22 24 24 25 26
16 17 19 20 21 22 22 24 25 26
 16 17 19 20 21 22 22 24 25 26
17 19 20 21 22 22 24 25 26
19 20 21 22 24 25 26
20 21 22 24 25 26
 21 22 24 25 26
 22 24 25 26
22 24 25 26
24 25 26
24 25 26
25 26
25 26
26
5
9
10
10
14
16
16
17
19
20
21
22
22
24
25
26
28
30

Castalia



Tables

Table 5.1: Key assumptions for Castalia's CCO model	23
Table 5.2: 10-year capital expenditure scenarios	25
Table A.1: Granular issues with the model	28
Figures	
Figure 0.1: Castalia's modelling of nominal tariffs under a Building Blocks Model with	
financing compared to the GravelRoad network economic model	7
Figure 0.2: Castalia's initial assessment	8
Figure 2.1: Failure rate curve used in the NEM	11
Figure 2.2: Bathtub curve / Weibull analysis diagram	12
Figure 2.3: Wellington region councils' capital expenditure (real FY24 dollars)	13
Figure 2.4: Office of the Auditor General analysis of planned and actual capital	
expenditure	14
Figure 3.1: GravelRoad NEM average price chart, "Scenario Baseline: 9% pa"	18
Figure 3.2: Building Blocks Model used by water, electricity, gas and	
telecommunications network regulators	20
Figure 3.3: GravelRoad Network Economic Model Tariff Input, Capex Output	21
Figure 5.1: Castalia's modelling of nominal tariffs under a Building Blocks Model	
compared to the GravelRoad network economic model	24
Figure 5.2: Trade-offs between starting debt, tariffs and capex when establishing a joint	
entity	26
Figure 6.1: Castalia's initial assessment	27
Figure B.1: Decision-making framework for joint delivery options	30
Boxes	
Box 2.1: How water utilities typically approach capex spending decisions	15

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Definitions

BBM	Building Blocks Model
ссо	Council-Controlled Organisation
Councils	The nine local authorities and one regional council in the Wellington region are exploring joint delivery arrangements for water services
DIA	Department of Internal Affairs
IRA	Infrastructure Renewal Accounting
IRC	Infrastructure Renewal Charge
LTP	Long-Term Plan
LWDW	Local Water Done Well
MEAV	Modern Equivalent Asset Value
NEM	Network Economic Model
Preliminary Arrangements Act	Local Government (Water Services Preliminary Arrangements) Act 2024
Report to Councils	A report dated October 2024, titled "Recommended Regional Approach to a Joint Water Services Delivery Plan and Delivery Model," was provided to councils. It includes outputs from the Network Economic Model (NEM)
WSDP	Water Service Delivery Plan within the meaning of the Local Government (Water Services Preliminary Arrangements) Act 2024
WWL	Wellington Water Limited

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Executive summary

Ten local authorities (Councils) in the Wellington region and Horowhenua are exploring a joint approach to delivering water, wastewater, and stormwater services. Currently, each Council is responsible for water services delivery, although five of the councils and Greater Wellington Regional Council jointly own, and contract with Wellington Water Limited (WWL) to manage assets and deliver services on their behalf.

The Government recently passed the Local Government (Water Services Preliminary Arrangements) Act 2024 (Preliminary Arrangements Act), which requires all councils to develop Water Service Delivery Plans (WSDPs) by 3 September 2025. WSDPs must outline future water services delivery arrangements (including joint approaches), and councils must commit to an implementation plan.

The Councils appointed a project team to advise on options for joint delivery of water, wastewater, and stormwater services. The project team has prepared a report titled "Recommended Regional Approach to a Joint Water Services Delivery Plan and Delivery Model", dated 4 October 2024 (Report to Councils). The project team hired consultants to model indicative scenarios for investment, tariff path, and borrowing of an entity combining the water, wastewater, and stormwater assets and operations of the 10-Councils. The output of this modelling in included in the Report to Councils and will inform councils' decisions to proceed to investigate a joint approach further.

The consultants prepared a "network economic model" (NEM), which is an Excel-based model estimating scenarios for capital investment and operating expenditure, and the tariff (water rates) path that results, given various assumptions. The NEM is accompanied by a note setting out methodology, inputs, outputs, and workings. A financial model has also been prepared that converts inputs from councils' Long-Term Plans into a form that the NEM can utilise and produces financial statements using the outputs of the NEM.

The NEM provides Councils with a modelled estimate of the investment needed for a joint 10-Council water entity and can incorporate different scenarios and assumptions. The findings from the NEM are included in the Report to Councils and directly inform the financial sustainability of water services chapter, set out in sections 26 to 32 of the Report to Councils.

The NEM is an important component of the assessment of the joint entity arrangement recommended by the project team, and subject to caveats set out in the Report to Councils.

Key conclusions on the network economic model and Report to Councils

Castalia was asked to focus on the NEM and the associated financial model and advise whether it can be used to support decisions at this stage.

Broadly, we think the Report to Councils, and elements of the NEM (caveated by our comments and recommendations for the next stage), can be used to support Councils' decisions to proceed to undertake further analysis on a regional 10-Council entity.

We have identified several weaknesses with the NEM. However, these can be improved upon in the next stages. Our conclusions are:

• The model's capex estimates are unlikely to reflect the actual costs a future regional utility will incur

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Item 7.1 - Attachment 4



- Essentially, the NEM uses a "pay-as-you-go" approach, assuming tariff income will pay directly for capex. The timing of capex spend depends on the amount of revenue from tariffs—when revenues are sufficient, capex spending occurs. This means that in the base scenario (and other scenarios we have seen) the entity's capex spending is unnecessarily constrained (and would not be accepted by the Commerce Commission). The Report to Councils therefore shows a tariff path that is potentially misleading to decision-makers about likely average tariffs, even with caveats in the text ¹
- The model produces outputs used in a base scenario for the Report to Councils and other scenarios in the appendices. However, alternative options are not presented. We understand alternative options were not in scope at this stage of the regional model project. However, Councils have received separate modelling (which we have not seen). We think it is important that alternative options are considered to inform the choices Councils have to make at this stage on whether a regional approach, with the underlying assumptions about investment and structure, is robust.

These key issues can be improved in the next stage

The key issues we have identified can be resolved in the next phase of regional entity analysis and planning. The NEM base scenario output in the Report to Councils is one estimate of the required capex and capex timing. Other scenarios, using other approaches to estimating investment needs should be tested. These could include assumptions derived from councils' LTPs.

The next stage approach to modelling paying for the capex (and other costs) should reflect standard utility financing principles. A standard utility financing approach would smooth costs over the useful life of the assets. Even with the NEM's very high capex estimate (which we think is too high), the tariff changes would then be more moderate. When we put NEM's (in our view very high) capex programme into a conventional utility Building Blocks Model (BBM), a much more modest tariff path is produced. Figure 0.1 illustrates this smoother tariff path. This standard approach assumes that capex is financed over a period that matches asset lives, and the entity has a balance sheet structure similar to water and electricity utilities in Australia, New Zealand and the United Kingdom. We recommend below that this standard utility financing should be used in the next phase, with some sensitivity analysis of different capex estimates.

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¹ We note the Report provides qualifiers that the results are not to be interpreted as forecast tariffs. Nevertheless, the tariff path input assumptions define how much capex is spent, and when, in the NEM.





Figure 0.1: Castalia's modelling of nominal tariffs under a Building Blocks Model with financing compared to the GravelRoad network economic model

Recommended practical next steps to inform decision-making

We recommend that Councils should do three things in the next stage of development of a regional water entity to comply with the Local Water Done Well legislative and policy programme:

- Adopt a standard approach to tariff modelling, using the BBM used by regulators in Australia, New Zealand and the United Kingdom and standard utility assumptions about financing
- Use maximum and minimum capex estimates scenarios, to test affordability and political sustainability of tariffs. The NEM capex estimation approach could be used as a maximum capex estimate (however, to be clear, scenarios should be developed with alternative methods than the NEM)
- Consider the opening debt position, tariff path and sequencing of capex, and how negotiations and compromises over these factors can be used to achieve a win-win-win solution for all Councils

Councils can then compare the joint approach to a counterfactual option or options (such as "going alone" or another joint arrangement). This will then enable Councils to make informed choices about proceeding with a regional entity and realising the available benefits.

Key conclusions on the 10-Council regional entity

We were also asked to provide an initial view on regional aggregation. In our view, the key objective of a water reform process is to ensure water services are safe, resilient, reliable, and customer-responsive at the least cost. We use the below six-point analytical framework of

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key parameters that will lead to this key objective. We have used this globally in similar water sector reforms and recommended its use to the Local Government New Zealand (in 2020), and Andreas Heuser, in his capacity as Chair of the Government's Technical Advisory Group on Local Water Done Well, advised DIA to adopt it in policy development. It is reflected in the Government's policy on service delivery vehicles.

We carried out an initial analysis using the six criteria. This was not exhaustive and does not constitute a recommendation that any single Council pursue the proposed aggregation. Our view is limited to whether the Councils should consider the proposal in the Report to Councils further. Notwithstanding our reservations with the modelling approach taken at this stage, in our view, there are many good reasons to proceed with further investigation of regional aggregation. However, each Council will have to compare the 10-Council entity proposal against other options. Other options could include "going alone" or some other joint arrangement with other Council(s).

In the below table, we set out our assessment, using the six criteria:

Criterion	Score	Castalia's initial assessment
Accountability to customers/stakeholders		 Moderate to good outcomes likely Will depend on the detailed design of governance and contractual accountability mechanisms—which can be enhanced Will depend on how hapū and iwi relationship structured
Incentive alignment		Larger organisations can develop their own incentives Will depend on quality of regulation Detailed design of governance mechanism could include contractual options to enhance incentive alignment.
Flexibility to future change		 Larger entity can respond to changes in sub-regional population growth Larger entity better positioned to respond to shocks and long- term risks (e.g. climate change)
Management and operational capability	2	 Larger entity can better recruit and retain skilled staff Performance-based remuneration possible with corporatised entity
Access to financing	9	 CCO with independent board, regulated by ComCom will have improved access to financing for needed capital investment. Equity finance options and risk sharing also improved
Economies of scope and scale		Majority of region's households have been on integrated network for 100+ years. Coordinated investment planning can realise cost savings.

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1 Introduction

Ten local authorities (Councils) in the Wellington region and Horowhenua are exploring a joint approach to delivering water, wastewater, and stormwater services. Currently, each Council is responsible for water services delivery, although five of the councils and Greater Wellington Regional Council jointly own, and contract with Wellington Water Limited (WWL) to manage assets and deliver services on their behalf.

The Government recently passed the Local Government (Water Services Preliminary Arrangements) Act 2024 (Preliminary Arrangements Act), which requires all councils to develop Water Service Delivery Plans (WSDPs) by 3 September 2025. WSDPs must outline future water services delivery arrangements (including joint approaches), and councils must commit to an implementation plan.

The Councils appointed a project team to advise on options for joint delivery of water, wastewater, and stormwater services. The project team has prepared a report titled "Recommended Regional Approach to a Joint Water Services Delivery Plan and Delivery Model", dated 4 October 2024 (Report to Councils). The project team hired consultants to model indicative scenarios for investment, tariff path, and borrowing of an entity combining the water, wastewater, and stormwater assets and operations of the 10-Councils. The output of this modelling in included in the Report to Councils and will inform councils' decisions to proceed to investigate a joint approach further.

The consultants prepared a "network economic model" (NEM), which is an Excel-based model estimating scenarios for capital investment and operating expenditure, and the tariff (water rates) path that results, given various assumptions. The NEM is accompanied by a note setting out methodology, inputs, outputs, and workings. A financial model has also been prepared that converts inputs from councils' Long-Term Plans into a form that the NEM can utilise and produces financial statements using the outputs of the NEM.

The NEM provides Councils with a modelled estimate of the investment needed for a joint 10-Council water entity and can incorporate different scenarios and assumptions. The findings from the NEM are included in the Report to Councils and directly inform the financial sustainability of water services chapter, set out in sections 26 to 32 of the Report to Councils. The NEM is an important component of the assessment of the joint entity arrangement recommended by the project team, and subject to caveats set out in the Report to Councils.

Report structure

This report addresses the questions set out in the Terms of Reference as follows:

- Section 2 discusses how the capex estimate outputs from the NEM are very high. This capex estimate could be a useful starting point, but other reasonable methods could come to different conclusions. As a result, the model is likely to be overestimating the required capex spend
- Section 3 outlines why the chosen capex plan and resulting tariff path are flawed because standard utility financing is not used. The capex plan and associated tariff path would lead to inequitable and economically inefficient outcomes. For this reason, we do not think this model produces results that are likely to be allowable by the future economic regulator. A different approach is needed for the next stages of analysis

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- Section 4 highlights that the NEM does not address the ultimate question councils will need an answer to in future: is a joint model a better option than going alone? The Report to Councils notes that this is a matter for each Council to consider and will require councils to take into account a range of factors and outcomes.
- Section 5 summarises these comments and recommends how the Councils can work to improve the NEM for the subsequent stages of the project
- Section 6 sets out our initial view on the aggregation proposal,
- Appendix A covers some specific technical elements that we think should be reconsidered for future versions of the NEM
- Appendix B illustrates a decision-making framework for councils to use when considering joint delivery options.

2 Model capex estimates are very high

Capex's need for a large, dispersed and diverse set of water, wastewater, and stormwater networks is very hard to predict. The task of estimating the capex need for the 10 Councils is even more challenging since all have used different approaches to asset valuation over time, records may be incomplete, and understanding of the networks is mixed. Pipes are buried, so their condition and age are not always known.

The Report to Councils and NEM modelling note acknowledges some of these limitations², and the modelling team have determined an approach to estimate the likely expenditure required to remediate assets and bring assets up to a "compliant" standard. It uses assumptions about asset conditions based on remaining asset lifespans to predict costs.

There are some positive aspects to this modelling approach, but also significant risks. The capex estimate for renewals used in the base scenario is one data point and may be at the higher end of estimates (Section 2.1). However, the NEM probably overstates the needed capital expenditure (Section 2.2). Future analysis could consider climate risk and resilience (Section 2.3).

2.1 Model produces a high estimate of capex for renewals

The model produces an estimate of the capex needed for the Wellington region, based on a series of assumptions. The model produces other outputs, based on other assumptions, which are included in the appendices to the Report to Councils. The base scenario uses optimised replacement values (from Councils' valuations), an average asset lifespan, and a probability framework to estimate the capex for renewals.

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² The Report to Councils notes the "great difficulty in estimating future investment requirements over the next 30 years, given generally poor asset condition information, [a] lack of detailed engineering assessment of [requirements], and uncertain growth investment." (p. 2).



Model uses replacement value and lifespan analysis to estimate renewal capex need

The NEM determines how much Councils need to spend on investment by using the optimised replacement value of assets as a starting point. The key assumption is that assets must be fully replaced at the end of their useful life. The total capex requirement is split into various categories including sustainability (keep-up), compliance, growth, and network remediation (catch-up).

The NEM calculates the average annual capital renewal spend required to sustain the network by dividing the total replacement value of the network by the average maximum lifetime of all assets, weighted by their replacement value. It also calculates the component of the network that is beyond the end of its service life by multiplying the proportion of assets in "poor" or "very poor" condition by the replacement value of the entire network.

The model's fault probability calculation could be made more realistic

The model calculates a fault cost in each year – the cost of attending to and fixing temporarily broken assets. The model predicts that fault costs will decrease from the current value of \$41 million per year to only \$3 million per year in FY2047 – a more than 90 percent reduction.³ This is because the NEM assumes that faults only occur to assets that are near to or older than their useful lives and that over time, all assets will be replaced at the end of their useful lives. Figure 2.1 shows the NEM approach.



Figure 2.1: Failure rate curve used in the NEM

However, predicting faults in water networks is more complex than this. Failures occur during all periods of an asset's life—the question is when faults are more likely to occur. Water sector assets are prone to failure during the following periods:

³ All in real terms

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- Early years: Immediately following installation ("infant mortality") when issues arise with improper installation, defects, contamination, improper sealing, and issues with soil bedding⁴
- Mid-life: Assets fail at random times for unforeseeable independent reasons such as such as soil shifting, seismic activity, and third-party interference
- Late-life: Asset fault rates increase in frequency as the asset reaches the end of life.

These three periods of the asset life lead to a U-shaped or "bathtub" failure rate curve. The bathtub curve (or Weibull analysis) has been empirically verified from observations and statistical analysis in water sector literature.⁵ This bathtub curve is illustrated below, where the blue line is the actual observed failure rate:



Attribution: Public domain

It is more likely that failures follow this standard bathtub distribution curve. As a result, we expect a more than 90 percent reduction in faults is highly unlikely. An increase in fault costs during the early years of asset life ("infant mortality") is also likely. The NEM does not account for these fault costs.

The model also does not factor in a trade-off between tolerating fault costs and renewing assets—in some cases, this strategy is more efficient than complete renewal. For example, if the cost of capital for full replacement is higher than the annual fault fixing costs, and future

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⁴ Contractors active in the Wellington region have advised us that a significant percentage of assets they have to fix in the Wellington region were installed in the last 3-5 years. The literature also confirms this to be the case: European Bank for Reconstruction and Development (2018), "The Art of the Possible: Smart Management of Assets in the Water Sector"; Mohammadi, MM (2019), "Development of Condition Prediction Models For Sanitary Sewer Pipes"; Kleiner, Rajani, "Comprehensive Review of Structural Deterioration of Water Mains: Statistical Models," *Urban Water*, September 2001.

⁵ Various sources confirm the 'bathtub' curve to be accurate for the water sector:



renewal costs will not significantly increase because of deferral, then the reactive fault fixing strategy is best.

Deliverability of capex will be challenging

The capex programme in total is a significant step up in the actual capex spent by all 10 Councils in recent years. A future 10-Council entity could probably be challenged to deliver the capex forecast by GravelRoad in the NEM. There is a risk it is not achieved due to capacity constraints in the sector. The Report to Councils notes that delivery planning will be a key part of the implementation plan and it will be important to work with the water sector to build capacity over time.

The NEM's capex forecast for the first year of the joint entity is 30 percent higher than what was budgeted for FY24. It is 150 percent higher than what was recorded in the FY22 audited financial statements, the last year for which there are actual numbers. The GravelRoad NEM forecasts that until FY48 the region's capex will grow at a compounded rate of 3.5 percent per year from the FY24 budgeted amount. The below chart illustrates the audited actual capex spend (light blue bars, FY21 and FY22), the annual budgets (dark grey bards, FY23 and FY24), and then the LTP forecast (dark blue line) and GravelRoad NEM forecast (light blue line).



The water sector needs significant additional investment. There is undoubtedly a need for better targeted and efficient operating expenditure, and probably higher rates of capex to meet regulated standards and provide safe, resilient and customer-responsive water services. However, local authorities have failed to spend their full capital expenditure budgets for the last decade, according to the Auditor General's findings below. There will need to be a focus on deliverability of the capital programme as part of the WSDP and implementation planning.

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Figure 2.4: Office of the Auditor General analysis of planned and actual capital expenditure



Source: Office of the Auditor General, from councils' annual reports. Figure 19, available at: <u>https://oag.parliament.nz/2024/local-govt/docs/insights-into-local-government-2023.pdf</u>

2.2 Replacement value estimates risk over-stating capex need

Using the replacement value of assets (even if the optimised depreciated value is used) is risky. The model does not consider the potential cost differences between the entire replacement of an asset (with a modern equivalent asset value or MEAV) and alternative approaches. Assets may be brought up to regulated, safe or environmentally sound standards without replacing the entire asset at its full MEAV.

Future utility unlikely to make binary choices

A future regulated utility would have a priority list of investments based on engineering assessments, observed failure rates, and its available financial resources. Financial resources depend on the tariff income, limits on how much it can increase tariff income, and the balance sheet capacity to borrow (from debt markets or council equity owners). Typical regulated utilities take this approach to capex planning.

A future utility would dynamically prioritise capital projects based on a detailed set of tradeoffs. Regulated standards would be the most important factor. It then has strategic needs, balance sheet constraints, and the trade-offs between targeted fault repair or wholesale replacement. The utility would adjust investment timing to optimise financial and operational outcomes, subject to regulators' input. Box 2.1 discusses how water utilities typically approach capex spending decisions.

The NEM assumes that choices about capex investment are binary. Assets are replaced in the years when they become poor or very poor (however, the decision on whether to replace in that year depends on the available revenue to fund that replacement). Either the entity spends the full replacement cost, or it does not, and it incurs fault costs. This means that the longer the catch-up renewals are delayed, the higher the fault costs. The model optimises so that

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fault costs are minimised. When catch-up renewals can be supported by the tariff revenue, the model makes that investment to avoid fault costs.

However, the model does not consider that there may be different choices available. It may be efficient to incur a fault cost, rather than undertake catch-up renewals. If the cost of capital for renewals is greater than the fault cost, for the same level of network performance, it would be better to incur the fault cost.

We note that complete renewals may be required for some asset types. For example, complete replacement is often required for asbestos cement pipes (which were installed in many New Zealand networks in the mid-century). In those cases, the NEM's approach is likely to be a better approach to estimating capex spending.

Box 2.1: How water utilities typically approach capex spending decisions

The NEM uses a binary choice between spending capex to renew old assets and incurring fault costs. It assumes that every asset on the network needs to be renewed completely and that the cost will reflect the replacement cost.

The following hypothetical example may illustrate why this is likely to overstate the needed capital investment. Let's assume a major water main has a replacement value of \$100 million, and it has reached the end of its modelled 75-year asset life. The NEM would assume that the entity should spend \$100 million immediately or face higher fault costs in future years and fail to comply with regulated standards.

An efficient utility would approach this problem very differently. Faced with an old asset, it would undertake a detailed assessment based on actual observations of the asset's condition and observed faults. It would determine the optimal strategy of addressing any performance problems, based on the cost of remediation and the regulated performance standard. This could include one or more of the following:

- Targeted replacement of components (for example, weakened joints)
- Reducing pressure
- Responding to faults as they occur ("living with it")
- Introduce new technology (for example, re-lining)
- Replacing the full mains pipe at MEAV
- Building a new parallel asset and continuing to use the old asset.

Water utilities around the world have very old assets that are still in use. For example, Istanbul in Turkey is still using centuries-old cisterns built by the Romans. London still uses sewers built by Sir Joseph Bazalgette in the 1860s. The approach to estimating the cost of renewing those very old assets is not based on their historical cost but on a holistic approach to estimating costs and optimising between various choices of repair, tolerating some faults, replacing key components and a brand-new asset. For example, as London's population has grown from 2.8 million in 1860 to 9 million in 2024, the Bazalgette sewers are still used, but a massive 25km Thames Tideway Tunnel is being built to supplement them.

Infrastructure renewal accounting is an alternative approach for newly corporatised water utilities

The proposed Wellington region entity will be corporatised. When corporatisation is proposed, it is prudent to take a different approach to accounting for new investment. This approach should reflect the reality of long-lived networks where owners have a range of choices for how to maintain and improve service levels.

In England and Wales, when ten regional water boards were corporatised and sold to private investors, a different approach to estimating capex was used. Infrastructure renewal

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accounting (IRA) was introduced in England and Wales to address the unique challenges of accounting for the long-lived infrastructure assets of corporatised water providers. When advising on corporatisation of utilities in developing countries we recommend a forward-looking approach that estimates annual expenditure, rather than trying to predict the exact amount and timing of investment. For example we are advising on corporatisation of the Water Authority of Fiji (supplies 150,000 connections, compared to 224,000 in Wellington/Horowhenua).

IRA is used for financial reporting of long-lived infrastructure assets—like pipelines and sewers. Instead of depreciating individual assets over time, IRA involves estimating the average annual expenditure required to maintain the serviceability of the entire infrastructure network. This estimated amount is charged to the profit and loss account as an infrastructure renewal charge (IRC). IRA assumes that the infrastructure is maintained at a consistent level of serviceability. It attempts to ensure that ongoing renewal and maintenance activities are accounted for to keep the infrastructure functioning effectively over time. The actual costs incurred for renewing and replacing infrastructure assets are capitalised on the balance sheet and amortised against the IRC. This ensures that the expenses are matched with the period they benefit.

This approach differs significantly from methods like replacement at MEAV, which estimate capital expenditure based on the current cost of replacing assets with modern equivalents. This approach has many strengths and would probably predict a lower capex programme for the Wellington region. This type of approach could be explored in future phases of work.

2.3 Climate risk impacts could be considered in the next phase

Climate risks are likely to change future capex needs. As the climate changes, water source resilience becomes more important. Redundancy and diversity of water sources become more important. The cost of renewing (or relocating) wastewater treatment plants and outfalls may also be impacted by sea level changes and coastal inundation risks. Climate risk modelling should be considered in future phases of work.

Climate risk modelling is a critical part of water utility planning for the future. Climate change is likely to place significant pressure on the provision of drinking water. For example, the stream flows to the city of Perth, Australia fell by 80 percent between 1970 and 2018 due to a change in precipitation patterns. A shift in weather patterns led to decreased rainfall in the region, increased temperatures, and altered atmospheric conditions that affected precipitation and runoff. Perth now uses very costly desalination and water recycling to provide water.

3 Utility financing approach would smooth tariff path

The NEM uses an approach to financing the predicted capex which makes limited use of debt. This means the tariffs from the model are artificially high for the first 30 years, and likely to be inequitable. While the Report to Councils acknowledges that financing will be considered in

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future phases, in its current form, the lack of efficient financing could misdirect decision-makers.

We also note that the report to Councils states that the modelling is for indicative purposes only and is not intended to represent an actual tariff path, nevertheless the tariff path has been included alongside NEM investment outputs, and tariff income defines how much capex is spent. The future economic regulator (Commerce Commission) would not accept this "payas-you-go" approach, so a different modelling approach would be needed.

3.1 Without debt financing tariffs appear inequitable and inefficient

The NEM base scenario assumes cash revenues will directly fund the capex it predicts is needed. This "pay-as-you-go" approach would not be accepted by an economic regulator and is inequitable and inefficient. The NEM assumes that capital investments, including growth, renewals, and backlog catch-up, are primarily funded through current tariff revenues. The capital expenditure timing is shaped according to how much tariff revenue is available, with any shortfall or excess adjusted via debt movements. Funds required to support capex come from FFO, and when capex exceeds FFO, the difference is borrowed.

The Report to Councils is clear that the NEM modelling scenarios are indicative only and are not intended to predict future tariffs. However, the NEM and the Report present a tariff path, and the tariff income defines when, and how much, capex is spent. Therefore, we think the presentation of the modelled tariff path makes it harder for decision-makers to understand the implications of the NEM.Councils' decision-making

We note that with standard utility financing, the tariff path would not need to be as steep, or as prolonged as modelled, but the longer term sustainable price would be higher.

Financing needs to be considered to ensure tariff path is equitable

The approach in the base scenario explicitly does not use financing to smooth tariff increases, noting this will be assessed in future phases.

The base case of the model assumes a 9 percent per annum tariff increase for 10 years, then holds tariffs steady for 15 years. Tariffs then drop significantly in 2050. We note that the 9 percent per annum tariff is one of the variable inputs of the NEW and that a range of other increases could be modelled and we would recommend that this is undertaken in next phases of work.

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Figure 3.1: GravelRoad NEM average price chart, "Scenario Baseline: 9% pa"

Source: Scenarios Options Appendix slide deck, dated 27 September 2024

The NEM does not use debt finance and conventional utility corporate finance approaches. The Report to Councils acknowledges that further work on financing will be undertaken. We strongly recommend that debt financing be incorporated into the next stage of analysis.

This would align the Wellington region proposal with publicly owned and regulated water utilities in Australia. Those utilities use conventional corporate finance approaches to finance large capex programmes. All electricity lines businesses in New Zealand (including the community trust-owned ones) use conventional corporate finance. Conventional utility businesses use a combination of debt and equity finance to pay for the capex cost of long-lived infrastructure assets. The typical debt/equity mix is 60 percent debt and 40 percent equity.

Debt financing is critical to local government's long-term infrastructure investment. The efficient and equitable use of debt financing was highlighted in the Productivity Commission's 2019 Local Government Funding and Financing report.⁶ The Auditor General also highlights the efficiency of debt financing in several reports.⁷

By spreading costs over an infrastructure asset's useful life, it aligns payment with usage, ensuring that those who benefit from the asset contribute to its cost. Matching the financing term to the asset's lifespan promotes intergenerational equity. Future generations, who will also benefit from the infrastructure, share in paying for it through future rates or charges used to service the debt. Using finance to pay for infrastructure over its useful life means that essential projects are less likely to be blocked by ratepayers exercising democratic voting pressure because of their immediate funding constraints.

A feature of Local Water Done Well is the announcement by the Local Government Funding Agency (LGFA) that it will lend up to 500 percent of the annual revenue of a corporatised,

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⁶ New Zealand Productivity Commission (2019), Local government funding and financing, chapters 6 and 7, available at: <u>https://www.treasury.govt.nz/publications/local-government-funding-and-financing-productivity-commission-inquiry-material-2018-2019</u>

⁷ Office of the Auditor General (2015), Matters Arising from the 2015-25 Long-Term Plans, available at: <u>https://oag.parliament.nz/2015/ltps/docs/ltps.pdf;</u> Office of the Auditor General (2018), Matters Arising from the 2018-28 Long-Term Plans, available at: <u>https://oag.parliament.nz/2019/ltps/docs/ltps.pdf;</u> Office of the Auditor General (2014), Local Government: Results of the 2012/13 Audits, available at: <u>https://oag.parliament.nz/2014/local-govt/docs/local-govt.pdf</u>



independently governed, council-owned water utility.⁸ We understand that the proposed Wellington region entity will comply with the LGFA's initial minimum requirements. Auckland Council, Watercare and the Government negotiated legislative changes that freed up financing for Watercare, thus avoiding a 25.8 percent annual tariff rise, and instead a 7.2 percent rise. Therefore, the use of additional debt finance (even despite the initial debt position of the joint entity) is possible, and even encouraged.

3.2 Different approach required for future economic regulation

The NEM's tariff-funded capex approach would not comply with the requirements of an economic regulator. Future New Zealand water CCOs will be regulated by the Commerce Commission. All water providers will have to comply with the requirements of the next Local Water Done Well Bill (expected to be introduced to the House in December). While the exact content of that Bill is not widely known, the core principles have been published in the Minister of Local Government's announcements of Cabinet decisions, including that Part 4 of the Commerce Act will be utilised.⁹

The LWDW reforms require that water service providers are financially sustainable. This means that the total cost of service should be recovered from tariffs (and other income, such as development contributions). The total cost of providing the service will determine the tariff path, not the other way around.

Future regulated utilities (like a Wellington region entity) will have to raise revenues that equal the total cost of service. The total cost of service, and the utility's revenue requirement, are P calculated according to the BBM illustrated below. The BBM calculates the allowable revenues (that is, the tariffs needed) by adding together the operating expenditure, an allowance for depreciation, a return on invested capital, and a tax allowance (where relevant). This model is used by economic regulators of water utilities in New South Wales (IPART), Victoria (Essential Services Commission), England and Wales (Ofwat) and by the New Zealand Commerce Commission for electricity and other networks:

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⁸ Local Government Funding Agency, 8 August 2024, <u>https://www.lgfa.co.nz/about-lgfa/news-and-market-announcements/update-local-water-done-well-and-additional-financing-high</u>

⁹ <u>https://www.dia.govt.nz/Water-Services-Policy-Future-Delivery-System</u>


Figure 3.2: Building Blocks Model used by water, electricity, gas and telecommunications network regulators



Note: WSP refers to "water service provider"

In our recommendations in Section 5 below, we set out how the economic regulator would determine the tariffs that a Wellington entity can charge. We assume that the NEM capex estimates are used, even though we think these are likely to be higher than the actual capex need.

3.3 Model rations capital available to the entity

Because the NEM does not use financing for new investment, as a typical utility would, the capital it has available is rationed. Even though we think the capex estimates are likely to be overstated, the NEM restricts the amount of capital the proposed Wellington region entity could spend.

The NEM makes fixed assumptions about how steeply tariffs can rise. This input determines the amount of capex that is spent. The timing of capex is largely a function of whether current tariff revenue can support the capex after deducting overheads and operating expenditure. As discussed, standard utility regulation and efficient utility structuring assumes that tariffs are set to recover efficient costs. Figure 3.3 below shows how tariff income is shaping the timing of capex spend.







As a result, the NEM is an inappropriate tool for estimating how much, and when, investment should occur. It unreasonably limits the choices available to the utility management team to decide what investments to make and how to prioritise these.

4 Modelling should inform choices Councils need to make

The NEM has been prepared to provide inputs into the Report to Councils. We understand some of the 10-Councils have received modelling using the same or similar framework as the NEM illustrating capex and tariff paths for each Council. Councils will use the Report to Councils, together with advice from officers, to decide on whether to proceed with investigating a joint delivery model further. To make this decision, Councils need to consider the advice and compare the 10-Council joint entity scenarios with one or more alternatives. Ideally, economic modelling should let Councils see the options, and how these options compare to the things that matter to the communities that Councils represent.

The scenarios presented by the NEM show very stark increases in prices for a decade. This risks potentially giving Council decision-makers a false understanding of the effect of the 10-Council option, even at this stage in decision-making. The tariff charts are caveated and indicative only, but they are still in the Report to Councils and there are risks elected members are misdirected.

The NEM provides some insight into different fixed capex sequencing options for a 10-Council entity. As noted above, the capex sequencing is constrained by the tariff income scenarios. The



NEM does not illustrate how individual Councils may be better, or worse, off if they were to attempt to fund, finance, and deliver that capex alone or in other sub-groups. The Report to Councils notes that this is a matter for individual Councils to assess.

Finally, as noted above, the NEM base scenario does not use financing efficiently. At this stage, the NEM approach, therefore, cannot show Councils whether or not the NEM's predicted capex will be any more affordable to their communities and ratepayers under a joint model (where water providers can borrow up to 500 percent of their revenues) or as a stand-alone business unit within their council. The Report to Councils notes that this will be developed in the next phase of work.

5 Recommended approach to improve model and approach to decisionmaking

We have also been asked to provide practical steps to improve the modelling approach for future phases of work.

The next phase of analysis should support Councils' decision-making on the relative benefits of the options available to them.

We recommend that a conventional utility financial model should be used, and the outputs of this model are compared with realistic counterfactuals for each Council. Now, the NEM uses different scenarios of relatively steep tariff increases to estimate the maximum level of capex a regional CCO could viably support.

Instead, we suggest the following:

- Adopt a standard utility approach to tariff modelling, using the BBM and standard utility assumptions about financing (Section 5.1)
- Use maximum and a minimum capex estimate scenarios, to check the affordability and political sustainability of tariffs. The NEM capex estimate could be used as a maximum capex estimate (Section 5.2)
- Consider the opening debt position and tariff path to achieve a win-win-win solution for all Councils (Section 5.3).

This will then enable Councils to make informed choices about proceeding with a 10-Council entity and then have discussions with each other about other important issues such as the allocation of ownership and decision-making rights.

5.1 Castalia's modelled approach produces a gradual tariff path

We suggest using the same approach used by economic regulators in New Zealand, Australia and the United Kingdom. This will produce a more gradual and equitable tariff path. When we used this approach, **even with the NEM's high capex estimate**, a more reasonable tariff pathway was available to Wellington region water consumers. This illustrates what is possible



with financing and shows stakeholders how reform can support sustainable investment and predictable tariff changes.

We recommend a Building Blocks Model approach to determining tariffs

The BBM, which is used by utility regulators around the world and in New Zealand would provide this insight. Ofwat, IPART, ESC, and the Commerce Commission use the BBM. The BBM estimates the total economic cost of service, and therefore, the allowable revenues. The BBM assumes capital expenditure is financed by debt and equity. Regulators typically assume an efficient debt/equity capital structure.

The BBM model used in this way would provide Councils with insights into **two key matters for their decision-making:**

- Tariff pathway under different assumptions
- Amount of debt that can transfer into the CCO (and where compromises by Councils might be required).

Castalia's approach to the tariff path is more gradual and more equitable

We have prepared a high-level initial analysis. The purpose of this is to illustrate the key choices that will drive tariffs under the future economic regulatory framework. Even though we think that the capex estimates in the NEM are probably too high, this framework shows that a **moderated tariff** pathway is possible.

We estimate a maximum capex budget forecast for the Wellington region, under different tariff path assumptions. This uses the LTP input data, LTP tariff revenue as a starting point, NEM starting debt assumptions and other assumptions for a conventional water utility with an efficient balance sheet. The key assumptions are in the below table.

Parameter	Assumption	Explanation
Debt to Revenue	500%	Under the new legislative regime, joint service delivery entities will be entitled to borrow up to 500% of their revenue from the LGFA
RAB	~\$3m	By using LTP data, we obtained the closing debt value for 2024. This debt value allowed us to solve for the lowest possible RAB while also adhering to the 500% maximum debt/revenue covenant, as well as the 80% debt/assets covenant
Debt/Equity mix	42% debt/58% equity	Within our BBM model, we have assumed a leverage of 42%. This value is in line with the Commerce Commission's document 'Cost of capital determination for the disclosure year 2024' and seems reasonable and in line with our expectations
Cost of Debt	5.97%	We have derived this figure from the Commerce Commission's 'Cost of capital determination for disclosure year 2024' document. This value seems reasonable and in line with our expectations
Cost of Equity	7.32%	We have derived this figure from the Commerce Commission's 'Cost of capital determination for disclosure year 2024' document. This value seems reasonable and in line with our expectations

 Table 5.1: Key assumptions for Castalia's CCO model

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We have modelled the tariff path using the above assumptions to illustrate how the tariffs will change over time to recover the cost of service, assuming the same capex is spent as modelled by GravelRoad in the base scenario in the NEM.





Castalia's BBM approach can also compare a joint entity to a Council-alone option

Our recommended analytical approach using standard utility assumptions can also be used to compare the 10-Council joint model to the Council-alone option (or other joint arrangements). This would enable a like-for-like analysis and highlight where opportunities for cost-savings and efficiencies are available, and how these can be shared.

5.2 Next stage should use a maximum and minimum range of capital expenditure assumptions

As set out in Section 3 above, we think that the GravelRoad NEM output probably overstates the required capital expenditure.

A future utility will have to manage its budget by optimising between operational expenditure and capital expenditure within a budget constraint—all overseen by Taumata Arowai (water quality), Regional Council (environmental outcome) and Commerce Commission (economic) regulation. Investment decisions will have to be informed by the regulators' requirements, and the budget constraints of ratepayers.

We recommend that the capital expenditure scenarios are further refined in the next phase of work using a wider range of source information. The NEM capex outputs could constitute a **maximum capex.** Councils' long-term historical average LTP capex estimates could be a **minimum capex.** These scenarios could be tested using independent expert engineering advice using typical utility approaches.

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We then recommend the 10 Councils adopt Castalia's suggested approach to financial modelling set out above. That approach can then test whether the tariffs payable under standard financing assumptions are **affordable** and **politically sustainable**.

We analysed the maximum possible capex that the 10 Councils would have to pay over 10 years, under the different tariff assumptions below. This shows whether the tariff increases are higher or lower, and what capex can be sustained by the joint entity.

Table 5.2: 10-year capital expenditure scenarios

Tariff assumption	Capex over the next 10 years
GravelRoad base scenario NEM output	\$6.2 billion
Constant real tariffs (based on BBM output)	\$3.6 billion
Constant real (after LTP growth)	\$6.1 billion
Constant real (start of LTP)	\$3.4 billion
5% growth	\$8.5 billion
9% growth rate	\$14.6 billion

5.3 Next phase of decision-making and negotiations should involve opening debt positions and tariff levels

Councils have choices about the best structure to deliver water services. Local Water Done Well encourages all councils to think about how structural choices will lead to water services that are safe, reliable, resilient and customer-responsive, at least cost.

Financial aspects are one (important) part of Councils' decisions to achieve better water services. Joint water organisations can achieve cost savings by exploiting available economies of scope and scale and enabling access to greater levels of financing (for example accessing the LGFA's 500 percent debt-to-revenue financing or borrowing directly from lenders). Larger entities are also likely to lead to a lift in management and operational capability. Other factors that should be considered include accountability to customers, flexibility to future change, and alignment of incentives. Appendix B below sets out this framework.

The financial sustainability of a future joint "water organisation" as proposed in the Report to Councils will come down to a small range of factors. We suggest that the next stages of financial analysis focus on these:

- **Starting debt position:** how much debt will each Council transfer into the joint entity and where can compromises be found?
- Tariff levels for specific Council areas: Will tariffs be differentiated and how can benefits of joint delivery be shared?
- Planned capex for Council area: Where can compromises be made (within regulated standards) on desired spending?

These three key factors will affect the financial sustainability when Castalia's suggested standard utility approach for analysing costs and tariffs is used. A change in any single factor

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requires an adjustment in one or both other factors. If a Council transfers more debt into the joint entity, tariffs will have to increase, or capex programmes cut (or both). If a Council wants to sustain lower tariffs, then it will have to reduce the amount of debt transferred or consider cutting its desired capex programme (or both). It is critical to note that cuts to capex programmes cannot go under the regulators' minimum requirements for safe, resilient, reliable and customer-responsive water services.





Source: Castalia

The negotiations can then focus on where compromises may lead to tariffs that are sustainable and affordable. All Councils have different starting debt positions, and different capex needs. There is no reason why the starting debt position of a future entity should include all debt that Councils have historically allocated to water. All past decisions are in effect 'sunk'. Each Council used different past financing strategies for water investment and operations. What matters for the future viability of the water entity is whether it can sustain operating expenditure and a capital investment programme that meets regulatory minimum requirements underpinned by affordable tariffs.

6 Castalia's initial view on the 10-Council regional entity

We were also asked to provide an initial view on regional aggregation. In our view, the key objective of a water reform process is to ensure water services are safe, resilient, reliable, and customer-responsive at the least cost. We use the six-point analytical framework of key parameters that will lead to this key objective. We have used this globally in similar water sector reforms and recommended its use to the Local Government of New Zealand (in 2020), and Andreas Heuser, in his capacity as Chair of the Government's Technical Advisory Group on Local Water Done Well, advised DIA to adopt it in policy development. This is reflected in the Government's policy on service delivery vehicles. Appendix B sets out the criteria.

Castalia



We carried out an initial analysis using the six criteria. This was not exhaustive and does not constitute a recommendation that any single Council pursue the proposed aggregation. Our view is limited to whether the Councils should consider the proposal further. Notwithstanding our reservations with the modelling approach taken at this stage, in our view, there are many other good reasons to proceed with further investigation of regional aggregation. However, each Council will have to compare the 10-Council entity proposal against other options. Other options could include "going alone" or some other joint arrangement with other Council(s).

In the below table, we set out our assessment, using the criteria:

Figure 6.1: Castalia's initial assessment

Criterion	Score	Castalia's initial assessment
Accountability to customers/stakeholders		 Moderate to good outcomes likely Will depend on the detailed design of governance and contractual accountability mechanisms—which can be enhanced Will depend on how hapū and iwi relationship structured
Incentive alignment		Larger organisations can develop their own incentives Will depend on quality of regulation Detailed design of governance mechanism could include contractual options to enhance incentive alignment
Flexibility to future change		 Larger entity can respond to changes in sub-regional population growth Larger entity better positioned to respond to shocks and long- term risks (e.g. climate change)
Management and operational capability		 Larger entity can better recruit and retain skilled staff Performance-based remuneration possible with corporatised entity
Access to financing	G	 CCO with independent board, regulated by ComCom will have improved access to financing for needed capital investment. Equity finance options and risk sharing also improved
Economies of scope and scale		Majority of region's households have been on integrated network for 100+ years. Coordinated investment planning can realise cost savings.



: Detailed comments on the Network Economic Model

Castalia's detailed comments on the Network Economic Model are set out below:

Appendix A

Item of issue	Cell reference	Note
Fault rate index	'Asset Condition and Faults'!D88:D244	As discussed in Section 2.1 of this report, we recommend this index exhibit a bathtub-curve behaviour, including infant mortality failure and constant failure components.
Cumulative fault rate	'Asset Condition and Faults' !F88:F244	The cumulative probability rate assumes all faults are independent of each other and of the asset life. However, faults occurring after an asset's assumed useful life are more likely to result in the decommissioning of the asset and its replacement by new capex. Thus, the actual incidence of faults for all assets as a whole is reduced in later years as the survivability of assets decreases. We recommend the faulting probability include some Gaussian behaviour to account for the drop-off in survival for old assets.
Faults cost (\$m)	'Network Investment'!M41:M80	The faults cost calculation begins with a base year and applies some factor to that base year calculated from the difference between the actual life and useful life of the assets. However, the faults cost does not take into account the change in the quantity or value of assets that could fault. We recommend adding a total asset value adjustment factor.
Properties served organic growth rate	ʻlnputs Outputs' !C27	The version of the model sent to Castalia noted an organic household growth rate of 1.3% per year. The most recent LTP data indicates much slower growth than recent historical averages. We calculate a compound annual growth rate of 1.0% per year. When we discussed this with the modelling team, they agreed that 1.0% was a more reasonable number given the current data and that it would be changed in future versions of the model.
Residual debt-to-revenue ratio target	ʻlnputs Outputs' !C47	This is currently set at 150 percent. As discussed in Section 3.1, the joint entity will be required to manage its financing as per a responsible utility, that is, maintaining an efficient capital structure. This will likely lead to a debt-to-revenue ratio above 150%.
Peak funds from operations permitted above sustainability	'Inputs Outputs' IC35	We don't consider there to be a need to limit peak funds from operations above sustainability. This arbitrarily reduces the amount of capex that can be invested and the tariffs that can be applied. This is especially true where the tariffs are calculated according to principles of regulation economics, such as with the BBM.

Castalia



Sensitivity testing	General	Several inputs have not yet been sensitivity tested, but have high uncertainty and high impact on outputs.
		We recommend doing sensitivity testing on:
		 Interest rates (currently set at 6%)
		 Compliance costs (currently set at \$2 billion)
		 Network marginal opex growth (currently set at 25%)
		 Overhead growth rate (currently set at 1% per year)
Compliance cost balance remaining	'Network Investment'!AB41:AB80	The compliance cost balance remaining is allowed to go to negative values in FY2028. It should not be able to.



: Decision-making framework for joint delivery options

Castalia's Managing Director Andreas Heuser was Chair of the Government's Technical Applying from of water sector reform. Castalia's framework in Figure B.1 below has been used in the policy design framework and has been suggested for councils to use when making decisions on joint arrangements.



Source: Castalia, based on advice to LGNZ and DIA



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31 Oct 2024

Review of Castalia's Regional Water Economics Model Peer Review Report

1. The Castalia report is incorrectly focussed

The regional programme has adopted a phased approach, with each phase designed to address specific decision points that participating councils need to consider.

Aligned to this phased approach, the regional economic model is being progressively developed, providing increasingly refined insights to support the critical decisions at the required milestones for each respective phase. Phase 1 is essentially the strategic case.

The purpose and intent of Phase 1 is to identify, size and provide a clear understanding of the water network's current challenges so as to inform the stakeholder audience how these challenges might be considered within the context of the government's reform agenda.

This includes presenting a comprehensive view of the trade-offs between various factors, including price paths, maximum pricing, compliance costs, debt, growth costs, fault costs, time required to fix the network, and reduce network failure risk. This is the purpose of the economic model.

The Castalia report focuses on how to turn a capital cash flow into regulated tariffs, which is a subsequent phase of the project.

Castalia's approach ignores the need to define the problem. It focuses on providing a "solution", which without the context of the problem means the stakeholder audience cannot make an informed decision, or have confidence that the problem will be resolved.

Presenting a solution (investment plan) at this stage is premature, and is not the focus of Phase 1. The investment plan is the focus of Phase 2, which is yet to commence.

2. Castalia report takes a single dimension view, which provides a very narrow lens

The regional economic model is a multi-dimensional model that uses principles of asset management, engineering and economics.

The model uses multiple levers to generate various scenarios, providing stakeholders with a multidimensional view of potential solutions, trade-offs, and the impact of different policy choices. It delivers clear outputs that inform decision-makers about the economic implications of each option, providing them with a view of how (well, or not) their problem could be addressed under the various scenarios.

Page 1 of 5





This prepares the stakeholders and decision makers to be able to make good decisions during the subsequent phase(s) of the programme.

Details on how these principles are applied in the model are outlined in the (42 page) companion document to the model, which provides a clear description of its methodology, assumptions and limitations. This has been provided to Castalia.

The recommendations provided by Castalia promote the use of a single dimension financing approach using the building blocks method (BBM) and the use of the maximum capital councils can afford to spend.

However, the recommendation is silent on the issue of network quality, service quality, and asset renewal backlog, yet these are the very areas that require sustained focus and remediation.

With over 20% of the water network conservatively estimated to be worn-out, the water network is far from operating in a steady state condition. Fixing leaks does not fix the network, and the network has to be fixed before it can become efficient - i.e. for the network to be operating in a steady state condition. To not explicitly consider this backlog (catch-up) will lead to inefficient use of funds and a waste of scarce resources.

Presenting a solution without a thorough understanding of the underlying problem risks leading to ineffective or even detrimental outcomes. It's essential for stakeholders to base their decisions on a comprehensive analysis of the challenges, risks and potential solutions to ensure that any interventions effectively address the root causes of the problem.

3. Tariff smoothing

Castalia's commentary on the "inequitable" price path is a misinterpretation of the model. The model intentionally highlights this "lumpiness" to illustrate the implications on the various investment needs by the smoothing of pricing - e.g. catch-up, keep-up, etc.

Ultimately, a smoothed price path is necessary for a regulated utility, and the model helps stakeholders understand the trade-offs between investment needs, affordability, fairness, and regulatory requirements when developing an investment plan in the next phase of the programme. It provides the basis for an informed dialogue with the regulator and ratepayers.

<u>The model is a tool to inform</u>; it allows various scenarios to be run so they can be considered within the context of other strategic factors - just producing a single regulatory financing view provides a very limited and potentially inaccurate view. It is not helpful in informing the stakeholder audience of the underlying problem and challenges.

Page 2 of 5





Having worked with regulated utilities over many years in New Zealand, Australia and developing countries, and at times with the regulator to review pricing and tariff structures, Gravelroad is very familiar with regulatory requirements and methods, including the building blocks method (BBM).

Gravelroad, as do many other companies, create tariffs from forward cashflow projections. This is a standard procedural step that occurs towards the back end of the "getting ready for regulation" process.

The challenge is not on turning cashflows into tariffs, but on determining a single implementable scenario of cashflows that adequately balance capital timing, price paths, peak average prices, debt, renewal, backlog, and network efficiency.

The next phase of model refinement will incorporate regional network resilience, climate adaptation costs and anticipated economies of scale. Once these are integrated, stakeholders will determine a desired price path, leading to a detailed investment-grade plan. This target scenario cash flow can then be translated into a "smoothed" regulatory tariff structure aligned with regulatory requirements and with consideration to resolving the underlying network problem and challenges.

4. Castalia's scope of work

Our understanding is that Castalia's scope was to inspect the integrity of the (economic) model that allows stakeholders to balance a wide range of decisions such as network repair rate, price paths, peak pricing, maximum debt, fault cost rate burden and network reliability.

Comments in the Castalia report indicate that they have not correctly interpreted the model or the (42 page) companion document explaining the model. Some of this may be attributed to their incorrect focus as outlined in item 1 above.

Most of Castalia's comments relate to either the choice of inputs to, or outputs from, the model. There is nothing in the Castalia report that offers improvement to the model itself with reference to the purpose and intent of Phase 1 of the programme.

We have however noted several incorrect assertions by Castalia regarding the regional economic model, which are addressed below.

a) Castalia assert the NEM produces a capex requirement that is likely overstated

While the asset conditions assessments of the network are of poor and incomplete quality, they are all we have. This does not make capex required either high or low. It just makes it uncertain. This is why we run many scenarios through the model.

Page 3 of 5





There is no way to determine the quality state of a network from financial assessment alone. Without understanding the backlog of maintenance and renewal in the network we cannot estimate its financial path to recovery.

Like most commentary in the report, this comment is in fact a comment on input data quality and not a commentary on the model's integrity when using this data to create capex estimates.

There is only one comment in the paper that indicates that renewal costs will be lower than estimated (by the Gravelroad model) because some assets can "still be repaired [rather than replaced]"

However, if an asset is still economically repairable then it is not yet at the end of its service life. The EoSL is defined as the point at which the forward cost resulting from an asset failure exceeds its replacement cost. From their comment Castalia appear to not understand this correctly and have drawn an incorrect conclusion that this means CAPEX is overstated by the model. This scenario would be captured under maintenance costs, not renewal.

We would urge caution in underestimating the degree of remediation required in the network. We know that there are significant underestimations of some of the pipe networks (Particularly AB Pipes in Porirua, and GI pipes in Lower Hutt which WW assessed as 90% in very poor condition) which may not be fully factored into WW's asset condition assessments.

If further inspection of the network shows that the actual cost of remediation is lower than expected, then the new entity will have less work to do. If however, it is worse than expected, then this is likely to result in an insufficient debt capacity for the new entity to remediate the network which will leave the network in its poor or declining state for longer. This makes the network more expensive to operate and more expensive to householders.

b) Castalia assert the model does not show alternative options.

There are 9x scenarios presented in the regional report including the network failure scenario produced by current consolidated LTP plans that show that current LTP forecasts of capital investment are insufficient to sustain the network at its current quality level, let alone repair it.

With regard to the model not being a full decision making tool due to councils not having alternative scenarios modeled, this capability was not in the programme scope and itself is not an issue with the model.

c) Castalia assert that insufficient debt has been used to pay for the network [which is "inequitable" and "misleading"].

Page 4 of 5





The model supports any level of debt funding and calculates debt covenant limits. Several scenarios have been used to find minimum cost points for both remediating the network and sustaining it financially. Stakeholders may choose to run higher debt levels towards the backend of the network remediation process to spread the cost of remediation over future generations. However, this decision is not without a cost consequence as high levels of debt require higher levels of interest burden which must be paid for by the consumer. The model allows this additional cost burden to be estimated so that stakeholders can make a more informed decision.

d) Castalia assert that use of the failure rate curve in the model is incomplete

Infant mortality failure rates are not explicitly modeled in the fault module (although in practice these are fully absorbed by the "tolerable fault costs") because the cost of early and mid-life pipe failures is not material compared to the rapidly escalating rate, cost, and impact of worn-out pipe failures.

The approximately 10:1 ratio of current leaks to anticipated leaks for a fully remediated network is produced from network engineering data. We feel comfortable with this estimate as it closely matches the leak rate measured independently by AECOM and GHD.

The problem is with the worn-out assets in the network – not the new ones.

It is unclear why Castalia are 'introducing' the concept of the asset failure rate curve (Bathtub Curve) in their review when it has already been explicitly used in the economic model. Its use is fully documented in the model companion document, and mathematically created and calibrated by the model to known inputs such as the annual faults cost experienced by the network.

Its outputs have been benchmarked against other fully remediated water suppliers (Sydney Water, KCDC) for reasonableness. We do not understand Castalia's objective in discussing the use of the bathtub failure rate curve in their peer review. We also note the Castalia provided copy of the model's fault rate curve is without the overlay of "tolerable faults".

Page 5 of 5



Factor met = 🖌 Factor met in part or with a caveat = 🖌					
Factor not met = X					idention.
N/A = Not applicable	MDC Stand Alone (In-			WUDELS for cons	deration
FACTORS	house business Unit)	MDC WSCCO	Wai + T WSCCO	Wellington WSCCO	
LEGISLATION					Legislation requires status quo (plus new requirements) to be consulted on and one
Mandatory consultation option	~	x	x	x	WSCCO or joint arrangement as a minimum
Likely to meet the revenue sufficiency test	1	✓	1	×	Wgtn regional model is somewhat dependent on WCC being part of the entity.
Likely to meet the investment sufficiency test	1	×	×	✓	
Likely to meet the financing sufficiency test	1	×	1	×	Wgtn regional report caveats financial sustainability with 'more work required'
FINANCIAL					
Ability to finance through LGFA up to 500% of operating revenue	×	1	*	✓	Must meet requirements of a WSCCO to access LGFA funding, including shareholder guarantees
Estimated establishment costs (from now to the stand up of the entity)	\$0.5M	\$3M	\$1.25M	\$5.12M	Wgtn regional model will increase depending on the number of councils that exit. Numbers are from Wgtn regional (est up to \$125M across 10 councils) and Wai + T reports (est \$5M across 4 councils)
Annual operating cost estimate (incl finance costs, excl depreciation)	\$10.52M	\$11.73M	\$9.63M	Not comparable	MDC option based on 2024/25 LTP yr1 plus uplift for additional staff, systems and processes to support regulatory changes. MDC WSCCO option allows additional costs to operate separate entity. Wgtn Regional option operating costs not comparable. Est operational costs for Wai + T are \$38.53M shared by assumed 4 shareholding councils
Ability to share annual operational & overhead costs	x	x	×	✓	
Likely average rates per connection at stand up	\$1,642	\$1,768	\$1,102	\$1,700	Wai+T model assumes savings from reducing debt repayment and depreciation funding from revenue, fund more renewals from debt
Likely average rates per connection at peak (assumed as year 10)	\$2,287	\$2,461	\$2,429	\$3,800	Wgtn option figure comes from Castalia's interpretation of Gravel Road NEM path graph. Castalia version using BBM produces \$2,300
Ability to share establishment costs	x	x	1	✓	
No harmonisation proposed	N/A	N/A	✓	x	This will ultimately be up to the entity and would be part of the financial strategy however the Wgtn model is proposing holding differential pricing for first 3 years.
Ability to free up debt headroom for MDC to apply to other non-water investment programmes	x	×	1	×	Transfer of \$40m debt to a WSCCO allows more debt head-room for non-water investments (\$30m per DIA report)
Council rates bills (urban only) will reduce (approx 40%) as 3Waters revenues are transferred to a CCO	x	1	*	4	In all WSCCO models waters will be invoiced by the WSCCO. Question mark over stormwater, which may have to continue to be rated for by Councils
No equity adjustment potentially required for WCC est \$300M	×	×	<	x	
Ability to increase 3waters borrowing by at least 68%	×	×	1	✓	
Ability to lower water charges because more borrowing can occur, and debt can be repaid over life of asset	x	<	×	x	Wellington regional economic model uses a different approach, not comparable.



LEGEND Factor met = ✓ Factor met in part or with a caveat = ✓ Factor net met = ¥							
N/A = Not applicable	MODELS for consideration						
FACTORS	MDC Stand Alone (In- house business Unit)	MDC WSCCO	Wai + T WSCCO	Wellington WSCCO			
Ability to smooth impact of investment in long life assets across longer periods of time and a higher borrowing ceiling	x	1	1	✓			
Increase in financial resilience for water services delivery than current operating model	x	*	×	✓			
Ability to accelerate proposed investment due to ability to borrow more	×	1	1	✓			
Ability to increase scope of work for capex projects due to ability to borrow more	x	1	×	x	Wellington model uses a different approach		
Ability to lower rates for non-water related projects if desired due to ability to borrow more	x	1	×	x	Wellington model est \$15 - \$17bn in first 20-25 years		
OPERATIONAL Interruption to BAU due to transition	Minimal	Significant	Significant	Significant			
Ability to optimise investment through joint capes programmes Ability to optimise investment through joint procurement approaches to lower costs	×	x	×	* *			
Ability to streamline operational asset management approaches, i.e. standardise pipe sizes, material types, parts held in stock etc.	x	x	×	1			
Current MDC resources will be sufficient to operate under this model	x	x	×	×	All resourcing will be up to new entity. MDC WSCCO and stand alone options will both an uplift in current numbers, a dedicated regulatory team of approx 3 staff etc (Wgtn model est 8 staff for 10 entities for regulatory services)		
Strong influence on work programme focusing on Wairarapa needs	1	*	4	x			
Ability to retain expert staff through competitive remuneration	Less likely	Less likely	✓	✓			
Governance by Elected Members	1	x	x	x	Flected members are not able to hold dual roles as FMs and Board Members		
Retain control over water assets and services	1	x	x	x			
Fit for purpose critical core IT systems	~	1	×	x	Wgtn regional report states 'significant investment will be reuqired to ensure that the WSCC0 has the full end-to-end digital capability to undertake its functions effectively.		
Supported by Iwi	Likely but not tested	Likely but not tested	1	x			
Top 2 options from MCA analysis through Wai + T project	N/A	✓	1	x			
Benefit of a professional board	X	✓	✓	✓			
Ability to support the growth of Wairarapa as a whole	X	X	×	х			
Ability to support SWDC in being able to provide a financially sustainable Water Services Delivery Plan	x	x	1	*			
Ability to support TDC in being able to provide a financially sustainable Water Services Delivery Plan	×	x	✓	x			
Scalable with ease and lower cost than alternative options	×	x	1	x	Wgtn regional model will depend on buy in price if join later		
Benefits of being a professional utility provider	x	*	*	*	Benefits include ability to have a pointed focus on infrastructure and asset delivery, more effective corporate roles as only focused on 3waters, can recruit experts in infrastructure at all levels rather than having to have general roles to cover numerous council functions, talent acquisition can be targeted more to infrastructure)		
Entity Go Live Date	N/A	Jul-26	Jul-26	Early 2026	Wgtn regional report states early 2026 with transition occurring through to 2027		





Wai + T Project





Contents

Introduction and Purpose
Executive Summary
Background
Scope and Scale of Wai + T Councils and Iwi Entities6
The Project 10
In Scope of Project
Out of Scope of Project 10
Project Timeline
Project Structure
The Wai + T Option 12
High Level Entity Design 12
Decision Making Framework and Evidence Gathering14
The Framework
Assessment Criteria and Criticality 15
Evaluation Process and Outputs
The process
lwi Involvement
The Outputs
Sensitivity Analysis
Supporting Evidence for Evaluation
Peer Review of MCA Framework and Process
Interpretation and Discussion
Affordability – the 'Elephant in the Room'
Affordability Tests
Price Path Graphs
Economic Regulation and the Regulated Asset Base
"Win - Win – Win - Win" Approach
Investment Needs – the Strategy
Modelling
Scale and Scope – Limitations and Opportunities
Implementation Feasibility and Complexity
Climate Change and Local Waters Done Well
Regional Council View

Ope	erational Benefits	36
Abi	lity to Deliver	38
Uni	queness of the Wai + T Networks	39
Imple	mentation	39
The	enduring project team	39
Ne>	xt Phases of Work	39
Pro	ject Implementation – Establishment Phase (on the runway)	43
Ind	icative Time and Cost for Phase 2 & 3	43
Risk A	Assessment and Mitigation Strategies	44
Alig	gnment with legislative intent	49
Concl	lusion – How do we feel?	49
Apper	ndices	51
1.	Council snapshots	51
2.	Project Team Biographies	51
3.	Criterion – definition, priority and risk assessment	51
4.	Blank MCA Framework	51
5.	Evaluated MCA Framework	51
6.	Peer Review Letter from Castalia	51
7.	Water Infrastructure Reform Planning Report	51
8.	Gravel Road modelling for Wairarapa councils	51



Introduction and Purpose

Under the Local Government (Water Services Preliminary Arrangements) Act a key decision required of councils when preparing a Water Services Delivery Plan (WSDP) is whether to continue delivering services as usual (whether under an existing CCO arrangement or alone) colloquially known as the 'status quo', or enter a joint arrangement with other councils, whether this be via a water services Council Controlled Organisation (CCO), Council Owned Organisation (COO) or other suitable model, for example shared services or a Community Trust.

The form of that joint arrangement, that is, with whom councils will work with, is being left to councils to decide.

Councils across the motu are approaching this decision in a variety of ways. For the Wairarapa councils they are actively engaged in investigating a Wellington Regional (10 council) option, a Wairarapa and Tararua (4 council) option and a Wairarapa (3 council option). Tararua is engaged in investigating the Wairarapa and Tararua (4 council) option and a Whanganui and Manawatu Regional (7 council) option. Council boundaries are shown for illustrative purposes in the map below:



The purpose of this report is to deliver on the project scope of work which is to inform the elected members of the Wairarapa and Tararua District Councils of what a joint arrangement comprised of those four councils would look like, and to evaluate that joint arrangement option against a set of criteria and weightings to come up with a score. Each practicable joint arrangement option (except the Whanganui and Manawatu Regional option) was evaluated against the agreed criteria resulting in a ranking of possible joint arrangement options designed to assist elected members in deciding what, if any, joint arrangement option they may wish to pursue. Altogether, this is known as the Wai + T Project.

Executive Summary

In this executive summary, we start at the end of our chosen process; that is, how do we feel about the outputs of the project that the team has been tasked at delivering?

Our scope of work was clear, it was to develop a Wai + T joint arrangement option, an assessment tool, and evaluate that option against the larger Wellington Regional joint arrangement option comprising ten councils. We are satisfied that we have delivered on this defined scope of work in a way that is sufficiently detailed and robust enough to enable elected members to make an informed decision on the joint arrangement options of Wellington Regional and Wai + T.

At project commencement, elected members were apprised of the agreed process adopted to assess and evaluate the options and then on the results of the analysis.

During the process feedback from sought on the appropriateness of the criteria, and input was sought from lwi to ensure their views were reflected.

At the end of the process, we have commissioned independent advice from experts on the framework and on the opportunities and limitations of economies of scale and scope. This independent advice was sought to supplement the expertise of the internal project team tasked with developing the scope of work.

The output of the multi-criteria-analysis framework developed indicated that a three or four Wairarapa or Wairarapa + Tararua joint arrangement option was the highest ranking. The key drivers for this outcome were:

- The view of Iwi, including recognizing the importance of the Te Rohe o Rongokako Joint Redress Act 2022 for the Wairarapa
- The ability to influence key strategic initiatives such as Water Resilience and Storage
- Ability to influence culture and deliver accountability locally
- The logic of a spatially similar sub-region being able to have a coordinated response to emergencies and standardized solutions for assets
- Right sized, fit for purpose systems and processes means innovation and cost efficiencies
- Less complexity and risk in establishment



• The ability to have strategic options in the future

Sensitivities on the weightings of criteria were performed and showed that only if there was a single set of criteria around financial projections would the larger regional ten council option rank highest, and then only marginally.

The pricing modelled for the two options come from two different perspectives, but neither can accurately reflect what tariffs the consumer will eventually face with certainty, as indicated by the disclaimers included in the Wellington Regional report.

We can make assumptions, receive advice, and intuit based on what we have seen in other regulated industries, but it will be the Board of these new entities and the executives they appoint that will be required to deliver to the regulatory regime, prepare the right-sized capital expenditure and operational expenditure plans, negotiate with the regulator, access funding, and implement for the communities they serve. Councils' role under a Water Services CCO model will be limited to a shareholder and what that entails under the constitution and shareholder agreement for example, issuance of an annual Letter of Expectations. Emphasis will need to be placed on capability and infrastructure experience of the new entity CEO and Executive Team. Key to that will be starting to think like a utility provider by optimising investment and debt levels to ensure intergenerational equity and optimal pricing.

The team has listened to feedback and looked at the risks of the project and identified mitigations for those risks including a peer review of the framework, adding a sixth step to the MCA, highlighting the importance of the Te Rohe o Rongokako Joint Redress Act 2022 for Iwi, appropriately considering what influence the councils will have in the future, the importance of good asset management planning, and the importance of alignment with legislative intent.

This report supports a strategic decision for councils but not the final decision as Councils must consult on the anticipated or proposed model for delivering water services in its Water Services Delivery Plan. Under the Act, a council must consult on its anticipated or proposed model or arrangement for delivering water services in its Plan and ensure that its consultation and decision-making process complies with the Act. Consultation must occur on the current model the council has adopted to deliver its water services, i.e. on its own or part of a CCO (including changes to comply with legislation) and one other alternative option.

Only following consultation on the plan can the project team start preparing the runway for establishing any new entity.

The evaluation undertaken in this report suggests the Wairarapa alone and the Wai + T joint arrangement ranks higher than the Wellington Regional ten council option.

Background

Scope and Scale of Wai + T Councils and Iwi Entities

Information about each council, their population, connected population, land area etc can be found in the respective Long Teram Plan / Enhanced Annual Plan documents for each.



A snapshot of important information for each of the four councils can be seen in Appendix 1.

In this section we include the additional information on the current delivery model and scope, and the lwi representation in the area, known as the Rohe.

Wairarapa + Tararua Rohe*:

Ngāti Kahungunu is New Zealand's third largest tribal group. Stretching down the North Island from the Māhia Peninsula to Cape Palliser, its territory is divided into three districts: Wairoa, Heretaunga and Wairarapa. The three divisions are Ngāti Kahungunu ki Te Wairoa, Ngāti Kahungunu ki Heretaunga and Ngāti Kahungunu ki Te Wairarapa.

The Rangitāne tribe are descended from Whātonga, who came to New Zealand from Hawaiki as a captain of the Kurahaupō canoe. As testament to early tribal expansion, their marae can still be found throughout the country. Some generations later the Rangitāne tribe migrated to Tāmakinui-a-Rua (around present-day Dannevirke), Wairarapa, Te Whanganui a Tara (Wellington), and Wairau in the south, and Manawatū and Horowhenua to the west. The Rangitāne people continue to claim mana whenua (traditional authority over the land) in these places.

(*Excerpts from Te Ara Encyclopaedia of New Zealand)



Existing Operational Model:

The scope and method of current water services delivery by council can be seen in the below table:

Council	No of plants	Delivery	Consultancy	Contractor	Depot
CARTERTON DC					
Wastewater Treatment	1	In house			
Water treatment	2	In house			
Network Maintenance		In house			
Capex Renewals		Outsourced with some Inhouse design	Egis NZ 5+1+1 contract	G&C Digger 5+1+1 contract	Council – in Carterton shared with Parks
MASTERTON DC					
Wastewater Treatment	4	In house	Technical Support, Optimisation etc outsourced		
Water treatment	2	In house	Technical Support, WSPs etc outsourced		
Network Maintenance		Physical work Outsourced	Engineering design outsourced	City Care 3+1+1 contract	City Care – in Masterton
Capex Renewals		Outsourced	Engineering design outsourced	City care and tendered	
SOUTH WAIRARAPA DC					
Wastewater Treatment	4	WWL			

Council	No of p	olants			Delivery	Consultancy	Contractor	Depot
Water	4				WWL			
Treatment								
Network					WWL Alliance		Fulton Hogan	Fulton Hogan – in
Maintenance							10-year contract	Carterton
Capex Renewals						WWL Panel contract to	WWL Panel	No local depot
						2026	contract to 2026	
TARARUA DC								
Wastewater	7	Internal	Chris French /	Tararua DC	Onsite			
Treatment			Rationale					
Water	7	Internal	Chris French /	Tararua DC	Onsite			
Treatment			Rationale / Tonkin					
			& Taylor					
Network		Alliance	N/A	Tararua DC	Oringi Business	Park		
Maintenance		/Collaborative		/Downer				
Capex Renewals	N/A	Alliance	WSP	Tararua DC	Oringi Business	Park/ TDC; Inventory site,	Pahiatua	
		/Collaborative		/Downer				



The Project

In Scope of Project

The scope of this project is to develop a joint arrangement option encompassing the Wairarapa and Tararua councils that is sufficiently detailed to enable it to be compared against other options. To do so a project team comprised of senior staff from the three Wairarapa and Tararua councils (1x each) has been tasked with:

- 1. Developing a joint arrangement option encompassing the Wairarapa and Tararua councils that is sufficiently detailed to enable it to be compared against other options.
- 2. Providing sufficient supporting evidence and a decision-making framework to enable evaluation of a joint operating model against other options for the delivery of water services (including the status quo).
- 3. Establishing the assessment criteria to enable options analysis within the decisionmaking framework, known as the Multi Criteria Analysis (MCA).
- 4. Assessing the Wellington Region joint arrangement option with the Wairarapa and Tararua Joint Council option.
- 5. Workshopping the options with elected members.
- 6. Commencing work on the details of a preferred joint arrangement option if directed by the Project Steering Group under a new term of reference.

The key details on the approach of the Wellington Regional Project option comprising the six Wellington Water Limited owners (Porirua, Wellington, Hutt, Upper Hutt, South Wairarapa and Greater Wellington), Kapiti, Horowhenua, Carterton and Masterton Councils and the Wai + T project option of the three Wairarapa councils and Tararua is shown in the table below.

Wellington Region (10)	Wai + T (4)
MOU signed 10 May 2024	Terms of Reference signed 5 July 2024
Led by largely external project team to councils	Led by senior staff internal to councils
Non-binding commitment to collaborate	Binding commitment to fund a defined scope of work
Defined exit ramps at end of each phase	Driving the decision on which option to proceed with by 30 October 2024.
Progressive decision making required	Progressive decision making required

Out of Scope of Project

Although the development of a Wellington Regional joint arrangement option is out of scope due to this is being led by a different project team under a separate MOU and funding



mechanism, it is in scope to assess the option derived from that process with the Wairarapa and Tararua Joint Council option. Also out of scope is the work Tararua is doing with Manawatu-Whanganui councils in a similar vein to Wairarapa with Wellington councils.

Similarly, out of scope also is development of the status quo / existing approach option for each individual council which will remain the responsibility of the respective council but must be compared against the joint council option as required by Part 3, clause 51. 2. a. (i) of the Preliminary Arrangements Act. However, in the evaluation process the team ran each of their existing delivery arrangement options through the MCA framework, and the option of a single council delivering services alone was modelled by the Wai + T project team as a stand-alone business unit (SABU).

It is a requirement that consultation with the community will occur on the existing delivery method versus the any new proposed delivery methods before a Water Services Delivery Plan is adopted by council and submitted to the government for certification.

Project Timeline

Critical milestones will be

October 2024	Wairarapa councils' decision on joint water service delivery plan
November/December 2024	Tararua decision on joint service delivery plan
Early 2025	Public consultation on entity structure and establishment
April 2025	Councils consultation Annual Plan (or Long-Term Plan amendment) setting out transition costs and potential effect on overhead allocations
30 June 2025	Target final date for Council pr-election decision on CCO/Entity and Annual Plans
3 September 2025	Completed Water Services Delivery Plan to be submitted to Secretary for Local Government

Project Structure

The Wai + T project used a parallel construct to the Wellington Regional Group structure with an Advisory Oversight Group (AOG) comprised Mayors or Councillors and Iwi, a Project Steering Group (PSG) comprised of Chief Executives, and a project team.

The key difference between the projects being that the Wai + T project team is made up of internal staff contributing on a part-time basis, except for the Project Lead who was seconded from her substantive role at South Wairarapa District Council for the term of the project.

Members of the three groups are as follows:

Advisory Oversight	Mayor Ron Mark, Mayor Tracey Collis,	
	Councillor Colin Olds, Councillor David Holmes,	

	Jo Hayes (Rangitāne) and Robin Potangaroa		
	(Ngāti Kahungunu)		
Project Steering	Janice Smith, Geoff Hamilton, Kym Fell (and in		
	his absence Corin Haines) and Bryan Nicholson		
Project	Robyn Wells (Lead and Principal Advisor 3		
	Waters SWDC), Maseina Koneferenisi (GM		
	Infrastructure and Assets MDC), Peter Wimsett		
	(Chief Advisor TDC) and Johannes Ferreira		
	(Infrastructure Services Manager CDC)		

Iwi representatives for the AOG were nominated by Iwi formally upon invitation by the AOG council membership.

Represented by the four lwi/Māori representatives on the AOG, the lwi/Māori partners in this Wai + T area include:

- Rangitāne o Wairarapa
- Ngāti Kahungunu ki Wairarapa Tamaki Nui-a-Rua Treaty Settlement Trust
- Ngāti Kahungunu ki Wairarapa Rūnanga
- Ngāti Kahungunu ki Wairarapa Tāmaki-Nui-a-Rua PSGE
- Rangitāne Tu Mai Rā Trust PSGE
- Rangitāne o Wairarapa Inc Rūnanga

Short biographies for the Project Team members can be seen in Appendix 2.

The Wai + T Option

The first task the team needed to deliver was a Wai + T entity model sufficiently detailed to allow comparison to the Wellington Regional entity.

The Wai + T entity as described below has been used for financial modelling purposes and for ranking against the MCA criteria as described in the following sections.

More detailed design is contemplated at the next stage of the project, if agreed, and will involve an MCA process of the form of the entity, i.e. Council Controlled Organisation etc to confirm the details. For the purposes of this analysis, it is assumed a CCO will be the form of entity, this is based on the required funding envelope which can only be supported by Local Government Funding Agency (LGFA) if the entity is a CCO.

High Level Entity Design

The Wai + T joint arrangement option is a new Council Controlled Organisation-like entity that delivers water services to the connected consumers and urban areas (for stormwater) of South Wairarapa, Carterton, Masterton and Tararua districts. Other entity structures are permitted to be



considered by the council, such as business units, joint arrangements, consumer trusts and the council-controlled organisation (CCOS)s. However, only CCOs will have enhanced access to LGFA borrowing limits of 500% of revenue. The access to greater borrowing may prove critical to achieve future sustained service delivery.

The new organisation is required to have an independent board from councils, professional management and a head office based within the four-district area.

Funding will be required for a treasury function, credit rating, regulatory fees and the usual reporting for a CCO.

Although a decision for the new entity, there is likely to be one or more operational depots for the dispersed areas being serviced, it will be adequately resourced, have appropriate plant materials, standard turnaround times, and fit for purpose systems and processes.

Existing assets, debt, and revenue streams (both domestic and non-domestic) will be transferred from council into the new entity, whereafter the revenue streams will be realigned and optimised for efficiency. The exception to this is stormwater assets, that are difficult to separate from other non-water council assets, such as footpaths, kerb and channels, roading design, state highways and the transition of rural-town boundaries. For this reason, the new entity may end up contracting to deliver the service, while councils remain with stormwater assets, debt and future investment.

The Regulated Asset Base for the entity will be constructed from the latest fair value assessment of each organisation.

A win-win-win calculation will be agreed to account for:

- Starting debt
- Investment needs
- Tariff expectations

We have assumed an integrated capital investment programme across the four-districts, optimised to enable staging and efficiencies. We have also assumed procurement will be centralised and run out of the head office.

All staff currently employed within existing council water service operations are expected to be transferred into the new entity so that local knowledge and experience is retained, excluding tier 2 roles. It is anticipated tier 1, and 2 roles (the CEO and direct reports) will be contestable.

The entity will have its own set of values and culture with a unique Wairarapa-Tararua flavour, enhanced through careful selection of the new CEO and senior level staff.

We have assumed a brownfield approach to ensuring strong processes, systems and data management will be developed that is fit for purpose and right sized. Much of this initial work was done in preparation of the previous reform. However, new software systems can be costly and complex to implement, so the decision and timing to change systems will be one of the entity's first challenge. Contracting councils to perform some existing functions in the interim may be an option for the new Chief Executive and the new staff of the entity.



We have assumed the projected start date of the CCO will be 1 July 2026, however, depending on the financial construct this date may be earlier from a legal perspective The decision to proceed is a matter for public consultation.

Establishment costs are estimated at a combined \$5 million based on the Wellington modelling. This is permitted to be borrowed back to Council from the settled-up organisation on day one when assets and debt is transferred / vested into the multi council CCO or if transfer occurs earlier the entity will be able to attain its own establishment funding through the LGFA.

It is anticipated the Wai + T entity will also have a coordinated emergency response office that will be standalone but also work closely with existing offices such as WREMO.

Governance will set the strategic vision for the entity, and this will align with other important initiatives such as water resilience, storage and the Te Rohe o Rongokako Joint Redress Act 2022.

It is expected shareholding councils will furnish a Letter of Expectations (LOE) which will denote specific strategic areas they wish to influence.

The entity will work closely with Rangitāne and Ngāti Kahungunu across a single Rohe.

Decision Making Framework and Evidence Gathering

The project team prepared the framework for evaluation and carried out the evaluation process between July and September 2024. Because of the nature of the environment the project is being run in; that is, emerging legislation, parallel projects, progressive decision making required to meet deadlines; it was necessary for evaluations to be conducted with an understanding that new or refined information would emerge. However, a robust process and methodology run through a sensitivity test should provide the best information for decision making.

The Framework

The team elected to take a five-step approach (and possibly 6th) in developing a decision-making framework called a Multi-Criteria Analysis (MCA), much like the approach used in the procurement and assessment of tenders and technical solution decisions. The steps were as follows:

- a. Identify assessment Criteria What is important to us?
- b. Assess criticality of criteria What is more or less important?
- c. Develop definition and anchored scale for evaluation of criteria How do we determine whether the option should be ranked poor, good or excellent against the criteria?
- d. Investigate Criteria individual criteria to be investigated through as part of the workplan Why did we assign the score, on what basis?
- e. Evaluate multiple options of water service delivery using the set agreed criteria and anchored scale.
- f. Assess how the outcome 'feels'.





Assessment Criteria and Criticality

A long list of criteria was collected from several sources including the Waikato and Hawkes Bay transition teams, Whanganui / Manawatu via TDC, the draft legislation, and identification of measurable indicators in the financial models that were being utilised. These criteria were reduced to a short list and shared with the CEO group for comment, then further refined with the final criteria being shared with elected members of all councils

The financial criteria were peer reviewed by consultant Matt Townsend to ensure they were measurable from the modelling we had and aligned with legislative requirements.

Iwi were asked to create and score criteria important to them.

The final set of criteria chosen sat in six areas:

Financial	Criteria that will impact affordability for the consumer
Level of Service	Criteria that will influence the experience of our customers
Operational	Criteria that will drive efficiencies and opportunities for our District/s
Relationships and	Ease to set the right values and culture to drive performance in the
Trust	organization and align with Māori view
Strategic	Criteria that may support achievement of our strategic goals for our District/s
Legislative	Does the arrangement proposed support achievement of the criteria required
Requirements	in any WSDP to be accepted by the Minister

Within the six areas, a final 41 criteria were agreed and assigned a criticality of low, medium or high by the project team.

The criticality of low, medium or high was scored as a 1, 2 or 3 in the matrix giving a higher criticality a higher impact in the final calculations.

In total there were 23 high, 12 medium and 6 low criteria in the framework used for the assessment.



The project team, with the assistance of a Finance expert for the Finance area, agreed the anchor points for a rating of poor, good or excellent between zero and 100.

A full list of the 41 criteria with a definition, criticality assessment and anchor scales can be seen in Appendix 3.

Evaluation Process and Outputs

The process

The process followed was:

- 1. The core project team, through a moderation process in a series of workshops entered scores for poor, good or excellent against all criteria which resulted in a set of scores and a ranking for all options assessed.
- 2. The PSG iwi reps and a representative from Tamaki-nui-a-rua participated in a workshop on iwi criteria and rated the options against the agreed criteria.
- 3. The approach was workshopped with the PSG and AOG.
- 4. The approach was discussed and informally endorsed by Department of Internal Affairs.
- 5. The evaluation results were released to all four councils on the same day, Wednesday 21 August.
- 6. The evaluation was discussed in detail with the CFOs of the three Wairarapa councils.
- 7. The evaluation results were workshopped in detail at two Teams meetings with elected members, iwi representatives, and leadership team staff from all four councils on 3 and 4 September 2024.
- 8. Sensitivity testing was subsequently carried out by CE of CDC which successfully tested the criteria and weightings for bias.
- 9. Iwi workshops were held on 17 and 19 September in Tamaki nui a rua and Whakaoriori.
- 10. A hui with SWDC mana whenua was held on 16 October.
- 11. The draft report was workshopped by the three Wairarapa councils on 17th and 18th of October.

The working framework with the weighting used the criteria, criticality and anchor scales is included in Appendix 5.

Iwi Involvement

The project team invited lwi to develop the set of criteria that reflected what was important to them in assessing each option. A starting set of principles was refined down to the following by attendees from Rangitāne and Ngāti Kahungunu in Wairarapa and Tararua:

Starting Principles:

Whakapapa - genealogical links		
Te mana o te wai - the life force of water		
Enabling of Te Tiriti o Waitangi		
Mana motuhake - identity, self determination		

The final agreed assessment criteria and anchor scale, included within the Stakeholder / Trust section of the MCA was as follows:

Criteria	Poor 0 - 30	Good 31- 60	Excellent 61-100
lwi support	No support	Partial support	Fully support
		with concerns	
Whakapapa - genealogical links	No historical	Relationships have	Direct whakapapa
	whakapapa	been from some	to same line
		agreements, some	descent
		whakapapa links	
Te mana o te wai - the life force	Limited mana	Mana	Strong mana
of water			
Enabling of Te Tiriti o Waitangi	Limited mana	Mana	Strong mana
Mana motuhake - identity, self	Do not identify	Some identity	Strong identity
determination			
Mauri - life force /peoples'	No connection /	Connection /	Strongly
interaction with the wai	impact	impact	connected

All Iwi criteria were considered to be of high criticality.

The lwi participants then rated each option against the criteria to arrive at a score.

The importance of the Te Rohe o Rongokako Joint Redress Act 2022 was included under the Strategy area of the worksheet as an important district-wide initiative that needed to be supported by any new entity.


The Outputs

Preliminary results of the MCA process resulted in the following scores and rankings:

Original results:

	Financial	Levels of Service	Operation al	Relationsh ips & Trust	Strategic	Legislativ e Requirem ents	Weighted Score TOTAL	RANK
Weighting	25%	20%	15%	20%	10%	10%	100%	
Regional (10 councils)	57%	33%	46%	23%	37%	63%	42%	6
Wai + T	56%	68%	67%	92%	70%	75%	70%	2
MDC alone	29%	66%	68%	35%	76%	81%	54%	3
CDC alone	29%	66%	63%	35%	76%	81%	53%	4
SWDC status quo	26%	38%	45%	34%	38%	60%	38%	7
TDC alone	26%	66%	67%	35%	76%	81%	52%	5
Wairarapa only	54%	71%	70%	88%	76%	75%	71%	1

The difference between the Wai + T and Wairarapa three council group option was marginal, but clearly those options ranked significantly higher than the Wellington Regional option. Key drivers of this result were the following:

• The view of Iwi, including recognizing the importance of the Te Rohe o Rongokako Joint Redress Act 2022 for the Wairarapa



- The ability to influence key strategic initiatives such as Water Resilience and Storage
- Ability to influence culture and deliver accountability locally
- The logic of a spatially similar sub-region being able to have a coordinated response to emergencies and standardized solutions for assets
- Right sized, fit for purpose systems and processes means innovation and cost efficiencies
- Less complexity and risk in establishment
- The ability to have strategic options in the future

The reasons for the rating of each option against the criteria made by the moderating team were recorded in the framework which can be seen in Appendix 5.

Sensitivity Analysis

Questions were raised in the workshop sessions about the weightings for each criteria area used by the project team, and if they were different would the results materially change.

A series of sensitivities were run to show how the rankings would change if the weightings were adjusted to say, for example, increase the financial weighting and decrease the Relationship and Trust weighting. The results can be seen in the following series of tables where the ranking for the Regional (10 Council) Option only becomes the highest ranking when the single consideration is financial criteria, and then only marginally by 1% point (5th option below).

Option 1: Enhancing the weighting for Levels of Service

	Financial	Levels of Service	Operational	Relationships & Trust	Strategic	Legislative Requirements	Weighted Score TOTAL	RANK
Weighting	25%	30%	15%	15%	10%	5%	100%	
Regional (10 councils)	57%	33%	46%	23%	37%	63%	41%	6
Wai + T	56%	68%	67%	92%	70%	75%	69%	2
MDC alone	29%	66%	68%	35%	76%	81%	54%	3
CDC alone	29%	66%	63%	35%	76%	81%	53%	4
SWDC status quo	26%	38%	45%	34%	38%	60%	37%	7
TDC alone	26%	66%	67%	35%	76%	81%	53%	5
Wairarapa only	54%	71%	70%	88%	76%	75%	70%	1





Option 2: Highest weighting on Financial and level of Service

	Financial	Levels of Service	Operational	Relationships & Trust	Strategic	Legislative Requirements	Weighted Score TOTAL	RANK
Weighting	30%	30%	10%	10%	10%	10%	100%	
Regional (10 councils)	57%	33%	46%	23%	37%	63%	44%	6
Wai + T	56%	68%	67%	92%	70%	75%	67%	2
MDC alone	29%	66%	68%	35%	76%	81%	55%	3
CDC alone	29%	66%	63%	35%	76%	81%	54%	4
SWDC status quo	26%	38%	45%	34%	38%	60%	37%	7
TDC alone	26%	66%	67%	35%	76%	81%	54%	5
Wairarapa only	54%	71%	70%	88%	76%	75%	68%	1

Option 3: 50% weighting for financial

	Financial	Levels of Service	Operational	Relationships & Trust	Strategic	Legislative Requirements	Weighted Score TOTAL	RANK
Weighting	50%	25%	5%	10%	5%	5%	100%	
Regional (10 councils)	57%	33%	46%	23%	37%	63%	46%	3
Wai + T	56%	68%	67%	92%	70%	75%	64%	2
MDC alone	29%	66%	68%	35%	76%	81%	46%	4
CDC alone	29%	66%	63%	35%	76%	81%	45%	5
SWDC status quo	26%	38%	45%	34%	38%	60%	33%	7
TDC alone	26%	66%	67%	35%	76%	81%	44%	6
Wairarapa only	54%	71%	70%	88%	76%	75%	65%	1





Option 4: Remove Relationships and Trust area from weightings

	Financial	Levels of Service	Operational	Relationships & Trust	Strategic	Legislative Requirements	Weighted Score TOTAL	RANK
Weighting	50%	25%	5%	0%	10%	10%	100%	
Regional (10 councils)	57%	33%	46%	23%	37%	63%	49%	5
Wai + T	56%	68%	67%	92%	70%	75%	63%	2
MDC alone	29%	66%	68%	35%	76%	81%	50%	3
CDC alone	29%	66%	63%	35%	76%	81%	50%	4
SWDC status quo	26%	38%	45%	34%	38%	60%	35%	7
TDC alone	26%	66%	67%	35%	76%	81%	48%	6
Wairarapa only	54%	71%	70%	88%	76%	75%	63%	1

Option 5: Only weight Financial

	Financial	Levels of Service	Operational	Relationships & Trust	Strategic	Legislative Requirements	Weighted Score TOTAL	RANK
Weighting	100%	0%	0%	0%	0%	0%	100%	
Regional (10 councils)	57%	33%	46%	23%	37%	63%	57%	1
Wai + T	56%	68%	67%	92%	70%	75%	56%	2
MDC alone	29%	66%	68%	35%	76%	81%	29%	4
CDC alone	29%	66%	63%	35%	76%	81%	29%	5
SWDC status quo	26%	38%	45%	34%	38%	60%	26%	6
TDC alone	26%	66%	67%	35%	76%	81%	26%	7
Wairarapa only	54%	71%	70%	88%	76%	75%	54%	3



Supporting Evidence for Evaluation

At the time of the evaluation workshops the project team had the benefit of the following to inform the scores given for each option against the set of criteria:

- Financial Sustainability draft chapter from the Wellington Region project team
- Water Infrastructure Reform Planning report commissioned by the four councils prepared by Matt Townsend utilising the DIA created and peer reviewed Pricing and Funding Path model
- Local Government (Water Services Preliminary Arrangements) Bill post committee of the whole house version
- Wairarapa Regional Hub discussions for Entity C / G design from the water reform process in 2023
- Local Water Done Well Fact Sheets released 8 August by DIA, and
- Discussions with iwi representatives

Post the initial evaluation, the following was available:

- Local Government (Water Services Preliminary Arrangements) Act passed 2 September 2024
- Wellington Region Water Services Delivery Planning Recommended regional approach to a joint Water Services Delivery Plan and delivery model draft report released 4 September 2024

Further, there were one-on-one discussions with the DIA, presentations by the Wellington Regional Group in a Combined District Forum and Elected members briefing, workshops with iwi, webinars with DIA on WSDP and potential council entities, and finally, the release of the full Wellington Regional Group report on 4 October 2024.

The report excludes any analysis presented by DIA after the report's preparation.

Peer Review of MCA Framework and Process

To provide more surety to the decision makers Castalia (external strategic infrastructure advisors) were approached to peer review the decision-making framework and assessment criteria that were developed as part of the scope. This included appropriateness of the multi-criteria approach, completeness and appropriateness of the criteria selected, the criticality assignment to each criterium, and the weightings of criterium areas.

Castalia agreed to prepare a targeted review of the multi-criteria framework and assessment criteria by fully reviewing the materials, understanding the framework, and comparing it to international and local best practice for water sector reform of this type. Their feedback is based on their global experience, personal familiarity with "Local Water Done Well" and advice given to transition New Zealand's council-owned water utilities into better-performing, regulated, and financeable utilities.

Castalia's letter can be seen in Appendix 6.

Castalia concluded that Wai + T are following a robust policy process and their evaluation criteria support sound decision making. They also went on to suggest some improvements for the next stage.



Interpretation and Discussion

Affordability – the 'Elephant in the Room'

Moving away from a rates-based local government approach to collecting revenue and managing debt to an economic regulation regime similar to that used by the Commerce Commission for electricity providers (utilities) and Auckland Airport (for example) means a fundamental shift is required by council when considering their role in determining affordability for the water consumers.

Councils will need to start thinking in terms of the Regulated Asset Base (RAB) and the Building Blocks Model to determine revenue¹. The new entities will be required to show that their capital expenditure / operating expenditure plan is 'just right', colloquially known as the Goldilocks Rule, and will have to accept an independent party (the regulator) certifying the 'least cost' to deliver the right services.

Overlaying all of this will be the legislative requirements for Financial Sustainability by 30 June 2028, Investment Sufficiency and Revenue Sufficiency tests, and the yet to be released Economic Regulation regime to be implemented through the Commerce Commission.

What all this means is that we cannot with certainty predict what the prices, known as the 'tariff', will be to our customers in the future. We can make assumptions, receive advice, model, and intuit based on what we have seen in other regulated industries, but it will be the Board of these new entities and the executives they appoint that will be required to deliver to the regulatory regime, prepare the right-sized capital expenditure / operating expenditure plans, negotiate with the regulator, access funding, and implement for the communities they serve. Councils' role under a Water Services CCO model will be limited to a shareholder and what that entails under the constitution and shareholder agreement, for example, issuance of an annual Letter of Expectations. Emphasis will need to be placed on capability and infrastructure experience of the new entity CEO and Executive Team.

The Wai + T project has access to two models that can predict a pricing path; however, each model approaches the future tariffs in a slightly different way. Each model has its assumptions and limitations as can be seen by the disclaimer included in the Wellington Regional report:

• Forecasts almost always turn out incorrect, especially over a 30-year horizon.

• There is great difficulty in estimating investment requirements over the next 30 years, given poor information on asset condition, lack of detailed engineering assessment of what is required to address water quality to match the proposed water quality standards, and uncertain growth investment.

• Choices need to be made over a myriad of modelling approaches, inputs, and assumptions that reasonable minds may disagree with over some decades.

• There is a range of decisions yet to be made and legislation to be enacted to give effect to reform of water services.

¹ Presentation by Andreas Heuser at Water NZ Conference September 2024

• All modelled network economics figures should assume to have a +/-20% accuracy, such as in relation to revenue, investment and debt over the 30-year period, which is considered a sufficient level of accuracy for strategic decision-making purposes at this stage. Some of these, such as the available asset condition metrics, are known to be weak.

And:

This report is not intended to fulfil the requirements of a WSDP nor provide the basis for investment decisions or future pricing. Development of a full WSDP will need to be completed by councils during late 2024 and 2025 based on the confirmed approach.

We also note that there are always broader environmental factors that will shape future forecasts, such as political, social, economic and technological changes, and the physical environment e.g. climate change affecting growth/migration and service delivery, and other high impact/low frequency events.

An explanation of each of the models and the underlying strategic approach to Asset management is described in the sections below.

Criteria	Wellington Regional	Wai + T
Price uplift required on day 1	25 – 40% based on options	None, however, there is a
for all consumers	presented	suggested negotiation of starting
		positions on day one for a win-win
		situation (see below)
Price trajectory years 5-10	9% real	9.4% nominal (with inflation)
Price trajectory years 11 - 30	9% real	Not assessed
Establishment Costs	Not included in pricing but	\$5M included in price calculations
	estimated to be from \$75M to	
	>\$125M ²	
Transition Costs	Assumed to fall on each	Assumed to fall on each council
	council	
Time and complexity of	High due to number and	Medium
transition	complexity of councils	
	joining (see comments on	
	Implementation, Feasibility	
	and Complexity below)	

The information used in the MCA process was extracted from the reports available at the time and indicated the following:

The Wai + T option report referred to can be seen in Appendix 7.

² From Wellington Regional report



Note: Vulnerable Customer assistance is allowed for as additional operational expenditure in the Wai + T financial modelling. This allowance is 1% of total domestic service revenue each year. This expense is not subject to any efficiency.

Affordability Tests

The tests of Financial Sustainability, Revenue Sufficiency and Investment Sufficiency as judged by DIA in their WSDP templates were published after the MCA evaluation was completed. The Wai + T team have addressed Financial Sustainability in the report commissioned from Townsend Consulting, however, that report has not yet been rewritten to explicitly address the three areas.

Price Path Graphs

Under the Wai + T modelling each council was assessed as a stand-alone business unit under the new regulation requirements, and then modelled as a joint arrangement (Combo) with a starting adjustment to compensate for inputs and a sharing of efficiencies (operational and leverage) amongst the participants.

The average price path for the councils was then presented in the below graph as solo versus a combination (Water Services CCO), and then averaged over the four to allow a comparison to the Wellington Regional prices:





The Wellington Regional model employs an averaging approach across the region (detailed more in the Wellington Regional Report under Network Economics). The average price for the three Wairarapa councils developed using the network economic approach is described in the specific modelling done by Gravel Road for the three Wairarapa councils as included in Appendix 8 and is as follows:



Taking year 10 of any new future entity as a comparison point under the respective models, the average tariff for a domestic user under the approaches above would be:

- Water Services CCO Wai + T by council: From \$2,429 to \$5,550
- Water Services CCO Wai + T averaged: <\$4,000
- Network Economic Model for Wairarapa councils averaged at Year 2037: \$4,960



 Network Economic Model for Regional Entity averaged at year 2037 (noting a lower average starting price for a regional group): approx. \$4,200 (see note on harmonization and cross subsidisation below).

The key differences that drive the price results are the starting prices currently paid by Wairarapa councils³, the starting asset base, the assumed amount of debt transferred into the entity, the investment needs strategy, and the active management of debt and investment. The differences in approach are explained in the following sections.

It is important to remember however, that there will be 'cycles' for the economic regulator and by year 10 it will be the second or third tariff cycle which will no doubt differ from the modelling done today (refer previous disclaimers and notes in the Wellington Regional report).

This pricing also does not consider how the new entities will be thinking like a utility and will be optimising their debt and investment levels for intergenerational equity and smoothing of price paths⁴.

Price Harmonisation and Cross Subsidisation

The regulator will assess the cost to service by region and will impose their regulatory tests to sign off on any proposed tariffs.

Any cross subsidisation or harmonisation of tariffs will need to be decided by the Board of the WSCCO, it is not expected this will be included as mandatory in any future economic regulation.

Economic Regulation and the Regulated Asset Base

On day one of any new entity there will have to be an agreement by the joint parties as to the starting value of the asset base that will be a key driver for the economic regulation rules applied by the regulator and to justify the forward tariff pathway. The RAB drives the return on capital which drives tariffs.

There are many ways that councils can negotiate the agreed RAB however, it is likely that this could be a point of tension between parties to any arrangement. Options include:

- Book value of assets
- Back calculation to justify a set tariff pathway
- Depreciated replacement value of assets
- Zero?

We have assumed the Wai + T councils will use the latest valuation of their assets as the starting point for the RAB for a new entity.

³ Wairarapa councils, on average, currently pay a higher price for water services than the Wellington metro councils by approx. \$200 per year according to the Gravel Road report

⁴ As suggested by Andreas Heuser of Castalia in his Water NZ presentation



"Win - Win - Win - Win" Approach

A joint entity will require negotiations to take effect on day one to accommodate what each council is individually bringing into the entity. These factors include:

- Starting debt
- Investment needs
- Tariff expectations

It is possible that choices about debt in the CCO, tariff pathways and capex programme can be used in negotiations between councils to reach an optimal "win, win, win, win" solution.

In the Water Infrastructure Reform Planning Report commissioned by the project from Townsend Consulting, a partial "win, win, win, win" solution has been suggested to compensate each council for their starting position and this flows through into the price path presented and discussed in that model.

This suggested approach calculates adjustments (premiums and discounts) to each council's starting average households' prices. This suggestion attempts to recognise the debt and capital investment needed between the different council groups.

We have assumed the Wai + T councils will all agree that the starting debt position should be the amount calculated and agreed with DIA as part of the Water Reform programme, updated to reflect the 2024-26 financial year positions.

Investment Needs – the Strategy

The Investment Approach used for the Wai + T option is based on the asset managers from each council looking at their existing Asset Management Plan (AMP) and revising it to better align with new and potential legislation for quality standards.

The following table totals the first 10 years (of 30) investment per region estimated by council staff to achieve Local Waters Done Well compliance.

	10 years of pro	jects (\$millions)	State of State	Actual Dollars
	Real 2024 Dollars	Nominal (delivered with Inflation)	House Holds	Nominal 10 yr capital Spend per household
Masterton	\$135.90	\$171.61	9,684	\$17,721
Tararua	\$148.99	\$187.50	6,552	\$28,615
Carterton	\$97.11	\$122.62	3,485	\$35,177
SWDC	\$177.94	\$224.69	4,007	\$56,073
Wairarapa-Tararua Region	\$559.94	\$706.41	23,729	\$29,770

Looking only at the three Wairarapa councils, in real terms, an investment of \$424M was modelled.

For comparison, the investment in the Gravel Road report is \$450m in real terms for the three Wairarapa Councils for investment in the first ten years using the Network Economic strategy,

recognising that the Gravel Road model contemplates a remediation strategy that would not be complete for 22 years and does not include the full costs of compliance by project.

The infrastructure investment approach suggested by the Wai + T project is, in general, to rehabilitate or replace assets when justified by:

- Risk: The risk of failure Risk is assessed through the Risk Management Framework and existing artefacts such as Water and Wastewater Safety Management Plans.
- Economics: Investment are programmed with the objective of achieving:
 - the lowest life-cycle cost for the asset (the point at which it is uneconomic to continue repairing the asset), and
 - a sustainable long-term cash flow by smoothing spikes and troughs in renewals programmes based on the estimated economic lives of asset groups, and
 - efficiencies, by co-ordinating renewal works with capacity upgrade work or other planned works in the area.

The above strategy is achieved by combining strong asset management capability, fit for purpose systems and institutional knowledge and experience of an in-house operational team of experts that knows their assets and how their plants and networks operate. These contributing factors, makes prioritising of investment realistic and practical instead of a theoretical desktop exercise. Focus is placed on methodologies, such as asset criticality, condition assessments, leak detection exercises and the adoption of key tools like asset management systems, hydraulic models etc. Expertise in programme management will be essential for successful rationalising of work and optimised systems and processes.

Risk consideration

Risk is closely linked to consequences and likelihood of failure. Failure can be defined as when an asset can no longer deliver the planned levels of service. The infrastructure intervention strategy is to assess assets in relation to its consequence and likelihood of failure.

Likelihood of failure of an asset is derived from the condition and performance of the asset. Critical assets have been defined as an asset where failure could have significant consequences, either in the ability of the system to provide services to customer or the effect on the environment.

Assets that exhibit both high consequence, and high likelihood of failure carry the highest risk of failure and have been the primary focus for the investment program. Noting that a critical asset can still be run to failure as long as the mitigation to react is in place, i.e. fast availability of the replacement asset or items kept in stock. Use of this method enables capital expenditure to be pushed out to 'just in time' rather than spending on a 'what if' basis.

Economic Consideration

The strategy is to maintain levels of service through timely and effective planned and reactive maintenance interventions until the age or condition of the asset makes it uneconomic to continue to maintain. Within this, striking a balance between the frequency of planned maintenance and the incidence of reactive maintenance, is key.



The renewal program includes projects which will have an economical benefit such as reducing operational maintenance burden. For these projects Cost/Benefit analyses are completed to support prioritisation.

Evidence based investment

Quality data and information is pivotal to understanding the performance and capacity of the assets and driving optimal investment decisions. The strategy includes the continuous building and refining of the information base by integrating new and existing asset information from all assets. The plan is to generate data and information through modelling the capacity of our networks and capturing real-time operational data through monitoring systems. Collectively this information steers the strategic and operational decision making. Data quality improvement is included in the investment program.

Modelling

Network Economics Approach

The Wellington Regional Group has taken a Network Economics Approach which is described in their project report and summarised in Appendix H The Wellington Regional report to explains the strategic approach that underlays their modelling of Investment Sufficiency that will drive analysis of Financial Sustainability and Revenue Sufficiency.

Funding & Pricing Path (FPP) Model

The report evaluates the pricing of Local Waters Done Well services for contributing councils. It compares standalone delivery with a combined multi-council water services CCO operating at its best. The evaluation includes the impact of new economic and environmental regulators, as well as new financing tools for water service organizations.

It concludes that aggregation could result in significant savings.

Key Findings:

- 1. Investment and Pricing:
 - a. The report estimates the network investment required for each council to meet new water quality standards and anticipated wastewater and storm resilience standards.
 - b. Increased investment correlates with higher prices for households.
- 2. Legislative Changes:
 - a. New financing tools align debt servicing with infrastructure investment.
 - b. Councils can aggregate with neighbouring councils, unlocking operational and capital investment efficiencies.
 - c. Pooling credit risk between councils can enhance credit profiles and finance availability, potentially minimizing bill shock.
- 3. Financial Assessment:
 - a. The report assesses financing tools for standalone business units and a multi-council CCO using S&P's corporate methodology.
 - b. Aggregation could result in significant savings: residents would pay 25% less, and businesses 20% less, compared to standalone units.



4. Operational and Capital Efficiencies:

a. Estimations of operational, back-office, capital investment, and CCO setup costs show potential efficiency gains through aggregation.

Other Considerations:

- Elected members must balance various factors and stakeholder perspectives when deciding on the structure for delivering local water services.
- The right structure is crucial for unlocking the potential of new financing tools and ensuring sustainable water infrastructure.

Network Investment:

- Robust water infrastructure is essential for public health, economic prosperity, and environmental sustainability.
- Many networks across New Zealand, including Wairarapa and Tararua, are near capacity and require increased investment.
- New governmental water reforms introduce an environmental regulator with enforcement powers to ensure compliance with minimum standards.

Project Recommendations:

The report includes a costed project list to be completed within the first 10 years of the
water services delivery plan, ensuring compliance with legislated water quality standards,
addressing end-of-life renewals, and expanding capacity to attract residents and businesses.
The following summary provides an overview of the report's findings and considerations,
assisting councils in decision-making regarding the structure and pricing of water services.

	10 years of pr	ojects (\$millions)		Actual Dollars
	Real 2024 Dollars	Nominal (delivered with Inflation)	House Holds	Nominal 10 yr. capital Spend per household
Masterton	\$135.90	\$171.61	9,684	\$17,721
Tararua	\$148.99	\$187.50	6,552	\$28,615
Carterton	\$97.11	\$122.62	3,486	\$35,177
SWDC	\$177.94	\$224.69	4,007	\$56,073
Wairarapa-Tararua Region	\$559.94	\$706.41	23,729	\$29,770

The indicative totals of projects for the Council regions have been estimated to be:

Scale and Scope – Limitations and Opportunities

Economies of scale and scope must be considered when assessing the possible joint arrangement options, scale being a driver for achieving efficiency through shared consumer use of networks. The Wai + T project has chosen to expand the analysis of some of the efficiency assumptions, particularly for implementation of a new entity and in the approach to climate change and resiliency. We have also considered our Regional Councils, and whether they have a view of the appropriate entity to deliver services across their regions. Finally, we discuss the efficiencies incorporated into the Wai + T financial modelling and the uniqueness and opportunities for scale and scope for the four rural-



based councils. Noting however, that if Financial Sustainability of any option was dependent on efficiency gains at day one, it was marked lower on the operational efficiency criteria, that is, of greater risk to achieve the required sustainability in the MCA evaluation.

Implementation Feasibility and Complexity

The project team called upon Rebecca Chenery, the former Head of Customer and Digital for the Water Reform National Transition Unit (and Watercare Services Ltd Chief Information Officer), and now an independent consultant to comment on the MCA process and set of criteria being used by the team in general terms (not specific to the Wai + T or Wellington Regional options).

Rebecca advised that it would be important for us to consider implementation feasibility and complexity when assessing any joint arrangement options and suggested the following criteria be added to our framework:

Criteria	Risk to be Addressed
Timeline for Completion: Time to complete the amalgamation and achieve operational stability.	Increased time and cost to establish new model, delayed efficiencies
Technology Integration : Complexity of migrating data and establishing technology platforms.	Implementation can't be delivered within the approved cost/time constraints
Resource Availability : Availability of the necessary skilled capacity & capability to deliver implementation programme.	Implementation can't be delivered within the approved cost/time constraints
Change Management Complexity: The complexity of managing organisation change activities including transfer of resources	Skilled resources will leave, increasing operational risk

Further, on the question of economies of scope and scale, Rebecca provided the following comments in the critical areas involved in establishing an entities systems and processes:

1. Data migration:

- Data migration is one of the biggest areas of complexity and risk for any IT project, particularly one that involves the migration of numerous data sets, all of which will be in varying formats and of varying quality and completeness.
- Scale and complexity of data migration is influenced by both the number of source organisations and the quality/volume/complexity of historic data that needs to be migrated. This will directly influence the cost of data migration activities.
- Data migration is more complex the more 'source' organisations. This is simply due to the increase in source systems from which data needs to be extracted and standardised.
- An amalgamated organisation formed of a small number of organisations may choose to limit the amount of historic data to migrate given that is likely to be practical to 'swivel chair' back to the original organisation to source additional historic on a 'needs' basis. Where the amalgamated organisation is formed through the merger of a larger number of organisations, the extent to which you can rely on swivel chair activity without impacting day to day operations would be less therefore it may be necessary to migrate sufficient data to reduce/remove reliance on the original organisation.



- 2. Digital Capabilities/Systems (solution selection):
- The extent and sophistication of digital capabilities required by an organisation will be influenced by key drivers such as transaction volumes, size of the customer base, size of the workforce, geographical service area.
- Generally speaking, the larger and more complex an organisation, the higher the dependence on sophisticated integrated digital systems and tools to operate efficiently and meet operational business requirements as well as workforce and customer expectations.
- In the case of a smaller organisation, while digital systems and tools will still be required, the level of sophistication and integration of those tools may not be as great as a larger organisation. This is really about 'right-sizing'. For example, a large organisation may require a specialist CRM capability to manage a large volume of customer interactions efficiently, a smaller organisation may opt for a customer management capability that sits within a billing system.
- The difference in digital capability requirements between a smaller vs. larger organisation is also likely to see some variation in potential digital solutions and potentially the price point for those solutions.
- 3. Architecture Technical Complexity (linked to solution selection):
- The more technically complex and integrated the digital landscape, the more complex and likely higher risk the implementation will be.
- A smaller organisation is likely to have a simpler technical landscape with lower implementation costs and a different implementation risk profile to that of a larger organisation.

4. Implementation resourcing:

- A significant portion of implementation cost for digital solutions is implementation resourcing.
- Implementation resourcing requirements will primarily be a product of scope, technical complexity, solution selection decisions and implementation timeframe.
- The larger the scope, more complex the technical landscape and the more solution elements, the greater the implementation resourcing requirement and in all likelihood, the greater the specialist resourcing requirement.

5. Standardisation vs. retaining current variation:

- Decisions regarding process standardisation will heavily influence system design therefore implementation cost. Higher levels of standardisation are likely to be lower cost than an implementation approach that retains current local variation across common business processes.
- It may be more challenging to achieve standardisation in an amalgamated organisation comprised of a larger number of original organisations. An example of this would be a decision to retain current tariff structures and billing arrangements – the more variations of tariff structures and billing arrangements the more impact on implementation costs.



Operational/Licensing Considerations:

- 6. License Costs:
- Smaller number of FTE's may mean that per FTE license cost is higher than a larger organisation (who can achieve a better price point due to scale), however the total aggregate annual license cost is likely to be lower than that of a larger organisation.
- A smaller organisation is likely to have a smaller footprint of digital solutions (i.e. right-sizing) and therefore the license cost per FTE may be lower than that of a larger organisation who has a larger digital footprint.

7. Digital landscape technical complexity:

- The extent of the digital footprint and its complexity will directly influence the operational support requirements and associated costs.
- It is reasonable to expect a smaller organisation with a less complex technical landscape to have different support requirements than that of a larger organisation.

8. Digital/IT Operating Model:

- Operating model decisions will influence the operational cost profile. The primary driver will be sourcing choices what support is procured from vendors vs. internal resourcing.
- It is highly likely the operating model will be different for a smaller organisation vs. larger organisation. A smaller organisation may choose to engage managed services from vendors in preference to building inhouse capability.

9. Standardisation vs. retaining current variation:

• Decisions made during design and implementation (e.g. the extent of standardisation) will impact the ongoing costs to operate, maintain and support digital solutions. A more heavily standardised digital solution is likely to cost less to maintain and support than a solution that has a high degree of variation across standard processes. (e.g. multiple billing regimes which need to be updated annual when prices change.)

10. Workforce

• The size and geographic spread of the workforce will influence the number of Digital/IT staff required to support the workforce, operating model for an IT team and associated costs.

Clearly, from these comments, the larger the organisation and the number of entities combining into the new organisation, the higher the complexity, longer implementation period and risk. There are opportunities for a smaller organisation to right size the solution and reduce implementation risk. Rebecca's generalised comments support the ratings that the moderating team applied to each option in the MCA framework.

Climate Change and Local Waters Done Well

The Wairarapa-Tararua region has similar climate and coastline, facing common challenges. However, when there is a mix of geographical and climatic conditions, this can limit levels of service (LOS), resilience, and emergency response. This issue is critical for alignment decisions regarding who councils align with to establish a joint CCO. In major events, high population areas may be

prioritised for response, weakening local response and through loss of local understanding and options.

Climate change trends are influenced by geological features and weather patterns. This will affect service availability during droughts, storms, and coastal erosion. Local knowledge can provide bespoke solutions, while scale allows standardised solutions and coordinated responses. Individual councils, by themselves, may struggle with localised events, by limited capacity and spreading resources too thin. Recognition of Te Ao Māori and involvement of Iwi in Local Waters Done well will help interpret Climate Change and inform the CCO response.

Consolidating service delivery into a multi-council water services CCO can also enhance climate change management by:

- Resource Optimization: Pooling resources for advanced, resilient technologies and infrastructure.
- Improved Efficiency: Reducing redundancy and enabling strategic investments for better climate adaptation and mitigation.
- Enhanced Expertise: Attracting specialized staff in climate science and environmental management.
- Stronger Financial Position: Improving credit profiles to secure funding for climate projects.
- Coordinated Response: Facilitating efficient regional responses to climate events.
- Policy and Advocacy: Strengthening advocacy for supportive regional and national policies.

These advantages help a multi-council CCO scaled to a moderate size and in a similar climate, manage and adapt to climate change effectively.

All these factors were considered when assessing each joint arrangement option against the MCA criteria.

Regional Council View

GWRC have no operational bulk water provision reasons to have a vested interest in which way the Wai councils go on a WSDP. They have expressed a minimum viable product they want to see, which would be that Greater Wellington is at least in an entity with the Wellington Metro TAs they currently supply, as their only other alternative would mean they have to create a bulk water CCO which would be pricey.

In addition, from a regional leadership perspective, they have stated a broader interest in advocating for rate payers to get the best solution/outcome for the wider region over the longer term and that this is achieved on the largest possible scale that is practicable to ensure everyone benefits from it in terms of affordability, growth and investment in infrastructure and security of supply.

[Horizons Regional Council view is currently being sought by TDC]

Operational Benefits

It is obvious that with economies of scale comes benefits, however, one should also consider the cost of achieving scale, hence the need for a positive benefit cost ratio (BCR). It is therefore

imperative to get the right size that is fit for purpose to achieve the most favourable BCR. The project team is of the view that the Wai+ T CCO will be very similar to that of the Wellington Regional approach, however there is a significant difference in estimated establishment and anticipated overhead cost. Therefore, it is realistic assumption that the Wai + T CCO will have a better BCR than the Wellington Regional Approach.

Benefits that will be achieved through a Wai + T CCO:

- Resilience Resilience will be created in having multiple subject matter experts in critical roles. Key staff depth is currently a significant risk to stand alone councils due to cost and perception of number of FTEs.
- Critical Staff attraction and retention A Regional CCO will be more competitive in renumeration as well as providing growth potential to staff. Staff will also be able to work on larger and exciting projects. Attracting highly capable and experienced staff will be necessary for any new entity to achieve success. It is well known the 3waters sector is currently under resourced and needs to build resilience within teams to enable succession planning for future generations.
- Procurement The Wai-T CCO will be able to let large maintenance and renewal contracts that will attract tier 1 contractors to the region whilst creating an economic environment that is conducive for growth of local contractors.
- Procurement Standardisation of treatment plant equipment and construction materials will see result in long term financial benefits.
- Culture Having a Wairarapa/Tararua local head office will have a significant impact on the culture of the organisation.
- Capability The Wai + T CCO will be able to build on and expand on the current capability development in councils. There will be capacity to develop our own subject matter experts.

Because these benefits are hard to monetise, we did consider a very conservative efficiency in the modelling.

The modelling performed for the Wai + T council option has estimated this multi-council CCO could unlock 2.17% of operational cost savings cumulative per annum, capping out after a 15-year period at 28%. Noting that there is no operational savings factored in for the first 3 years allowing time for staff to become engaged, staff hirings, data sources to become cleansed and suppliers to readjust.

The estimation was derived from an analysis of 3 Water Operational Cost per Capita per Population Area where the cost of water network operations for NZ councils to trends lower when there is a larger number of households in those councils. The four Wai + T councils are presented in red in the below graph indicating some will benefit more from the efficiencies than others.



3 Water Operational Cost per Capita per population region



Ability to Deliver

Capability

The Wairarapa and Tararua has historically been able to attract Tier 1 contractors like Downer NZ, Higgins, City Care and Fulton Hogan for the delivery of maintenance and renewal contracts. Most of these businesses have a local presence with staff living in the Wairarapa and Tararua. We have also been able to secure the services of some of New Zealand's finest consulting engineering firms such as WSP, Tonkin & Taylor, Egis NZ, Lutra, Stantec and Beca.

Add to those, local businesses like G&C Diggers, PCL, Pope and Gray and CF Projects with the relevant skills and experience to deliver water maintenance and renewal contracts.

The Wai + T CCO is expected to be able to develop an aligned long-term program of works and attractive contracts that will give service providers the ability to develop further capacity and grow the local economy.

A joined-up entity of this size is able to produce consistent, ongoing, rationalised programmes of work, offering long term contracts and is expected to attract competitive contractor rates.

Availability

CDC, MDC and TDC currently hold multi-year maintenance, renewals and professional service contracts that will be novated into the new entity.

Standardisation and processes

Developing fit for purpose Standards and processes will improve quality, efficiency and help the entity deliver value for money. This will be one of the workstreams focused on during the implementation phase. The level of process and workflow complexity and sophistication required in a Wai +T entity will be far less than in a large-scale organisation. Rather than start from scratch, we will leverage off existing council processes and any areas of standardisation in place with a view to adopting the most appropriate.



Uniqueness of the Wai + T Networks

There are similarities and aspects of the four Wai + T councils that are unique and bespoke that will not naturally lend themselves to any economies of scale or scope with metro-based councils. These include the following:

- A fragmented, small-scale network of assets, i.e. not interconnected or subject to network runaway
- Mostly already served by water meters and volumetric charging in place in some form
- Mostly drainage and race stormwater assets as opposed to pipes
- A Wairarapa Combined District Plan in place
- Use of financial rather than development contributions
- Irrigation of treated effluent onto land as opposed to treatments such as sludge driers
- Climate challenges

On the last point, in the Wellington region egress of saltwater has been discussed as an important issue of climate change, however in the Wairarapa, of concern is the projected weather patterns and the need for water security through the application of a Water Resilience Strategy. The three Wairarapa Councils and Greater Wellington are already working in this area including consideration of what future water storage may look like for this region to include rural and urban consumers⁵.

Implementation

The enduring project team

Following a decision to proceed with a possible joint arrangement, a dedicated project team will be established along with a Project Steering Group and a Project Advisory Group to work through Phase 2, this core team will endure through to the Go Live date of the entity.

Early thinking is that the functional leads will be seconded in on a part-time basis from each of the 4 shareholding councils. An Establishment Director will be engaged full time alongside a fulltime Programme Manager. Contractors and Consultants will enter the programme on an as required basis for discrete pieces of work that require subject matter expertise or where the project team is insufficiently resourced. Additional council resources may be required for the establishment period (post consultation). A team of this size will be able to work with agility, focusing on specific areas whilst being cost effective. They will have the ability to both lead and deliver.

Next Phases of Work

Phase 2 – *Pre-Establishment (preparing the runway)* - is made up of the high-level components of work that are required before the project moves to Phase 3. Pre-Establishment will run from 1st November 2024 until end of August 2025, when we joint WSDP will be submitted to the DIA for approval. This will include public consultation on the proposed options, proposed governance

⁵ Wairarapa Water Resilience Strategy approved May 2021



arrangements, revenue and debt agreements along with proposed staff and organisational arrangements and structures.

Phase 3 – *Establishment (on the runway)* - is the implementation of the project encompassing all work required post consultation and the resolutions to stand up an entity. Establishment is expected to start in September 2025 and continue on until the new entity Board takes over operations. This timeline has not yet been agreed but may be between 12 and 24 months.

Phase 2 - Pre-Establishment

The Commitment

Before the project moves into the next phase, each Council needs to confirm their commitment to continue working together. The form of this will be shaped once a final decision has been made, however, it is imperative that each potential shareholding council understand as early as possible who they may be partnering with. The final number will impact the delivery timeframe, costs and the scope and make-up of the project team as work proceeds. It will also impact what options Council wish to publicly consult on.

Water Services Delivery Plan (WSDP)

A decision on the options councils wish to consult on must occur before Phase 2 can commence as Phase 2 will include the development and delivery of the WSDP. Water Services Delivery Plans are a way for councils to provide transparency about the costs and financing to deliver water services that meet regulatory requirements, support growth and urban development, and legislative requirements of revenue sufficiency and financial sustainability. Councils are required to prepare WSDPs by 3 September 2025.

Through the development of Plans, councils will provide an assessment of their water infrastructure, how much they need to invest, and how they plan to finance and deliver it through their preferred water service delivery model. The key components to the WSP will be:

- asset condition information and a related AMP,
- funding, financing and revenue requirements to achieve financial sustainability,
- the anticipated or proposed model or arrangements for delivering water services, including how these will meet compliance requirements, and
- an implementation plan for the WSDP including timeframes and milestones.

The Department of Internal Affairs (DIA) have provided material to assist with the development of WSDPs. This lends itself to single council owned entities. They have requested joined up councils to work directly with them on the development of a suitable WSDP.

Implementation Plan (within the WSDP)

WSDPs must include an implementation plan that sets out the process for delivering the proposed model or arrangements identified in the WSDP. The implementation plan will be a key feature within the WSDP. It will outline how a future delivery model will be established in Phase 3. This detail will be derived from the final model selected. However, in order to maintain momentum, until confirmed by a further MCA process, an assumption will be made that the selected model with be a



Council Controlled Organisation (CCO). Upon release of Bill 3 in December 2024 the details on its powers and funding arrangements will be evident.

The implementation plan is likely to include:

- The preconditions that need to be met before the establishment of the entity can commence.
- Governance arrangements during both the establishment period and steady state, including arrangements for establishing an appointments panel, the role of Iwi/Māori, a Board constitution, shareholder agreements, and clear timelines and decision points for the establishment and transfer of decision-making rights to the establishment Board and Chief Executive.
- Entry and exit rights of shareholders and the timing and process for this including, potential review points after X years.
- The structure, accountabilities, decision-making rights and resourcing for an establishment entity (potentially comprising a Chief Executive, selected functional leads and specialist support). This may include clear handover points from the project team and the establishment entity.
 - \circ $\;$ The strategy, processes and principles for: debt and asset transfer $\;$
 - Financing for new WSCCO
 - o Pricing detail
 - o Contract transfer
 - o People transition
 - Customer experience and billing.
- A high-level operating model and organisational design.
- Service delivery model and local service locations.
- Change process and strategy.
- Information systems requirements.
- Legal requirements, including merger and acquisition, incorporation, banking and tax.
- Costs, budget and funding.
- Procurement strategy.

The key design principles established through work with the regional project team on the governance are likely to be relevant, as below:





Consultation

Councils must consult on the anticipated or proposed model for delivering water services in its Plan. Under the Act, a council must consult on its anticipated or proposed model or arrangement for delivering water services in its Plan and ensure that its consultation and decision-making process complies with the Act. Consultation must occur on the current model the council has adopted to deliver its water services, i.e. on its own or in part of a CCO (including changes to comply with legislation) and at least one other alternative option.

Following consultation on the plan the project team can start preparing the runway for establishing the new entity.

Preparing the runway for establishment

Prior to entering the establishment phase the team need to develop a runway which will encompass a full programme of work to stand up the entity. This need to at a task level and will include resources, work effort and duration and a more detailed budget. At this point there will be options to consider based on the pace elected to move at, i.e. an entity can legally be formed relatively quickly but will be influenced by the financial strategy adopted and LGFA funding approval, i.e. If the preferred option is for the entity to pay for the establishment of the organisation, then what are the minimum tasks required to enable this to happen – transfer of debt & assets, funding mechanism in place, board appointed etc. A set of principles will need to be developed and agreed on to provide the necessary direction for the project team. The principles will be established by the project team, PSG and AOG.

There will be several activities that can commence in parallel which will be required regardless of the final model adopted that do not need to wait until the Establishment Phase commences. As much of



this work as possible will be undertaken or commenced during this phase once the programme has been approved. This will enable the team to plan accordingly, continue to move with momentum and maintain focus.

The key deliverables from this component of work for sign off by the AOG and the PSG will be:

- Programme principles
- Governance structure (roles and responsibilities) of the AOG, PSG & Project Team
- Budget
- Work programme (at appropriate level)
- Contract engagements of the project team

Project Implementation – Establishment Phase (on the runway)

The establishment phase will encompass all the work required before the entity goes live based on an agreed set of principles.

To stand up an entity at pace there will be a minimum viable product sought. This will be what are the absolutes (stage 1 tasks) that need to be in place before Go Live, i.e. constitution, board appointments, letter of expectations from shareholding councils, ability to pay vendors and so on. Whilst there will be key stages in the establishment phase that need to occur quickly, there will be others than can transition over a period of months, i.e. transition of staff, systems integration, premises set up, vendor contract novation's etc.

Costs to Date

The Wai + T project team was allocated a budget by the four councils of \$140,000 with a forecast spend to end of October at \$110k.

Funding of \$81.5k has been paid to the regional project team from the three Wairarapa entities as part of the regional project costs of \$1.15M.

Both above sets of numbers exclude the cost of the internal resources and executive leadership contributions on both projects.

Indicative Time and Cost for Phase 2 & 3

This section has been prepared on the assumption that the approach outlined in the Pre-Establishment and Establishment phases is accepted with a projected go live date of 1 July 2026.

Indicative high-level costings using high end of the scale have been based on previous external views that establishment of a four-council entity will be circa \$5M spread across the four councils, the likely breakdown is:

- Pre-establishment phase (up to 30 June 2025) \$1.51M equates to \$378k per council
- Establishment phase (1 July 2025 30 June 2026) \$3.48M equates to \$871k per council

It is to be noted that the funding may move from one financial year to the other depending on the work undertaken within each period. The actual cost split across shareholding councils is yet to be determined.

Indicative costs for a **regional entity** for the Wairarapa councils are as follows (noting this is the high end of the scale):

- Pre-establishment phase \$3M equates to \$213k in total for SWDC, CDC & MDC
- Establishment phase \$125M equates to \$8.9M in total across SWDC, CDC & MDC

Note the regional numbers assume that 10 councils for the regional entity. Less councils will mean greater costs for those remaining.

To achieve the development of a joint WSDP by the legislated deadline and the work outlined in Next Phases section, a decision to proceed by all Councils is required by 30 November 2024.

Risk Assessment and Mitigation Strategies

It is inherent on the project team to ensure that the decision makers have sufficient and unbiased information to reach a properly informed view to make their own assessment of the advantages and disadvantages of the different options.

Making this decision should enable the councils to commit to the development of a joint WSDP with either the Wellington Regional Group or the Wai + T Group or to take another approach with as much confidence as possible within the tight timeframes and set of assumptions provided.

As described in this report, an evaluation of the available options has been undertaken in relation to a set of key criteria including the ability to meet new regulatory requirements, affordability and cost to establish, ongoing operational costs and level of service, and relationships.

The evaluation has been performed under a Multi-Criteria Analysis (MCA) Framework developed inhouse by the project team and subsequently reviewed and peer reviewed by independent experts.

For each factor and the framework, the risks need to be identified, evaluated and mitigated in order to give the decision makers confidence in the process employed.

This risk assessment and mitigation section is intended to help support and inform:

- Councils to undertake a comparative analysis of the respective models against a set of criteria, and
- That the project scope of Wai + T has been satisfactorily delivered upon.

For clarity, it is not this project's scope to assess the existing delivery method, or what is sometimes called the status quo, or single council Stand Alone Business Unit (SABU) against the criteria. Each council will be required to consult with their communities on at least one option against the existing method before their Water Services Delivery Plan is adopted or submitted to government.



Risk	Evaluation	Mitigation
That the Wai + T option has not been	Without mitigation this is a high risk	The three Wairarapa councils already work together
sufficiently developed to enable it to be	because it is fundamental to the project	in several areas such as libraries, roads and
assessed against the criteria	scope.	emergency response and understand the Wairarapa culturally, spatially and operationally.
		Work had previously been undertaken on a
		Wairarapa depot model under water reform that could be called upon.
		Much of the Wellington Regional Group work reflects the legislation and proposed legislation and this could also be incorporated into the Wai + T option.
		Getting too far into design was a conscious decision as critical issues such as the role of lwi needs to be jointly worked through once the joint arrangement partners are known.
		In order to have an unbiased assessment process an assumed organisation was agreed and tested against the criteria before the MCA was employed.
That the decision-making framework employed	Without mitigations this is a high risk due	The framework and criteria have been peer
by the project team is not robust or appropriate	to the potential consequences of a poor	reviewed by Castalia.
meaning that elected members would be	decision; however, with the mitigations	
	the risk is reduced to Low.	

The key risks to the project scope are presented in the below table along with the mitigations employed or proposed.



Risk	Evaluation	Mitigation
deciding based on biased, incomplete or inappropriate information		The PSG and AOG have been involved in acceptance of the framework. Iwi were involved in developing the Iwi criteria and rating those criteria. An expert provided comments on the Implementation Deliverability and Complexity aspects as a review of criteria. Workshops were held with all councils to explain the process and framework throughout the project.
That the project team has not identified the best set of criteria for the factors being considered in the framework meaning elected members would be making a decision based on the wrong criteria leading to a sub-optimal decision	Without mitigations this is a high risk due to the potential consequences of a poor decision; however, with mitigations the risk is reduced to Low.	See mitigations above.
That we have not set the weightings of the respective factors to consider appropriately resulting in Incorrect weightings could skew the outcome of the evaluation inappropriately.	Without mitigations this is a high risk due to the potential consequences of a poor decision; however, the sensitivities show this is a Low risk and it is being further mitigated.	Sensitivities have shown that the results are consistent with a number of variations to the weightings and move appropriately. The weightings have been peer reviewed by Castalia.



Risk	Evaluation	Mitigation
That we have not incorporated all important factors to consider, for example, we did not consider the structure of any new entity as a factor	This risk is Low as missing a factor when 6 are already considered will not create a large bias.	The factors are being peer reviewed against best international practice by Castalia.
That the models used to assess a future price path are incorrect, incomplete or inappropriate and do not align with the future regulated view	This is Low risk because more than one model has been assessed in the project therefore not relying on a single source of information.	Use of multiple models. Use of independent financial consultants using in one case a DIA approved and PWC peer reviewed model from Water Reform. Checked with DIA to align the approach.
That we have not brought our key decision makers along on the journey sufficiently or transparently	This is a medium risk as ensuring all elected members and lwi / mana whenua from four councils are fully informed is a large task particularly with complex information under time constraints.	This has been mitigated as well as possible through the use of the project structure (AOG membership), multiple workshops and hui as well as email updates and individual project team members working in their individual council and iwi representatives.
That the iwi / Māori view has not been sufficiently captured in the process we have been following which will result in a loss of confidence by our partners	This is a high risk if not mitigated sufficiently to ensure all lwi authorities, mana whenua and hapu are as informed as possible on the decision being made as a result of this project.	Mitigation has been through appointed iwi representatives to the AOG, presentations and information sharing to iwi along the journey, workshops and hui, as well as involving lwi in the MCA process.
That councils have not been sufficiently informed or apprised of the risks for LWDW meaning it is not on their risk register	The ramifications of the decision to go with a joint arrangement is High for councils.	LWDW should be on councils Risk Register and considered by their Audit, Risk and Finance committees.



Risk	Evaluation	Mitigation
Wellington Water Limited biased the view of the Wellington Regional Group option.	This is a medium risk to create a bias to the outcomes if not mitigated.	In order to have an unbiased assessment process an assumed organisation was agreed and tested against the criteria before the MCA was employed. The assumption was that either new entity would be fully resourced or funded.
That the data going into the modelling is not based on actual projects leading to a reduced confidence in the numbers by the decision makers	This is a medium risk because ultimately the new entity will build their own AMP and prioritisation of projects, and all scenarios today are bult on a set of assumptions	The mitigation the project team has used to use local knowledge and existing AMPs and plans to build up the project information, rather than a top down, theoretical approach as taken by Network Economic modelling. The team then has a 'low tide' and 'high tide' option to ensure a fulsome analysis.
That the model has overestimated the ability of the shareholding council to set expectations or have an influence in the future	This is a Low risk as the weighting for the criteria judging influence is only 10% and sensitivities have shown it doesn't unduly impact on the results	Weighting of this area being appropriate to the importance.
That the model has not recognized the risk of not entering a larger CCO today and there will be restrictions on entering in the future	This is a Low risk as agility, adaptability and future optionality was considered in the criteria	Any decision made now is a decision for today but does not preclude good business decisions being made in the future by the future entity. Additional joint arrangements or shared service arrangements are assumed to be possible in the future.



Alignment with legislative intent

The Local Water Done Well legislation is designed to recognise the importance of local decision making and providing flexibility for communities and councils to determine how their water services are best delivered now and into the future. The points of focus are on meeting economic, environmental and water quality regulations whilst considering growth.

New economic regulation for water service providers is due December 2024 and will be implemented by the Commerce Commission. The Commerce Commission will have a range of regulatory tools to promote efficient practices and protections for consumers. This will ensure entities collecting revenue through rates or water charges is being spent on the level of water infrastructure needed.

The intent of the legislation is to enable entities to be focused on 2/3waters in its entirety and to empower these entities to operate as stand along organisations where they make their own decisions, set their own strategies with typical company reporting mechanisms such as a board of directors, shareholder letter of expectations and so on.

Whilst the legislation is written in such a way that councils are given decision gateways on the size and type of organisational model they elect, there is support for councils to join up to achieve a level of scale that will drive efficiencies and economies of scale. The ultimate decision on the size is up to each individual council.

The legislation allows for an increase in oversight by central government and access to funding through the LGFA based on a qualification criterion of being a Council Controlled Organisation.

The Act requires Councils to promote the long-term benefit of water services, not exclusive to financial.

Conclusion – How do we feel?

The Wai + T project team's scope was to develop a Wai + T joint arrangement option, an assessment tool, and evaluate that option against the larger Wellington Regional joint arrangement option comprising ten councils. We are satisfied that we have delivered on this defined scope of work in a way that is sufficiently detailed and robust enough to assist elected members to make an informed decision on the joint arrangement options of Wellington Regional and Wai + T.

At project commencement, elected members were apprised of the agreed process adopted to assess and evaluate the options and the results of the analysis.

During the process feedback from sought on the appropriateness of the criteria and input was sought from lwi to ensure their views were reflected.

At the end of the process, we have sought independent advice from experts on the framework and on the opportunities and limitations of economies of scale and scope. This independent advice was sought to supplement the expertise of the internal project team tasked with developing this scope of work and concluded that Wai + T are following a robust policy process and



their evaluation criteria support sound decision making. They also went on to suggest some improvements for the next stage.

After the evaluation, a three or four Wairarapa or Wairarapa + Tararua joint arrangement option ranked highest. The key drivers for this outcome were:

- The view of Iwi, including recognizing the importance of the Te Rohe o Rongokako Joint Redress Act 2022 for the Wairarapa
- The ability to influence key strategic initiatives such as Water Resilience and Storage
- Ability to influence culture and deliver accountability locally
- The logic of a spatially similar sub-region being able to have a coordinated response to emergencies and standardized solutions for assets
- Right sized, fit for purpose systems and processes means innovation and cost efficiencies
- Less complexity and risk in establishment
- The ability to have strategic options in the future

Sensitivities on the weightings of criteria were performed and showed that only if there was a single set of criteria around financial projections would the larger regional ten council option rank highest, and then only marginally.

This report therefore concludes that the Wai + T joint arrangement ranks higher than a Wellington Regional ten council option at this time, noting that within the criteria assessed, strategic optionality, i.e. joining up with others in the future, or procuring shared services from others, is an important criterium and assumed to be possible in the future.

Ultimately, the project team feels that the following Maori proverb sums it up best:

Waiho i te toipoto, kaua i te toiroa Let us keep close together, not far apart.



Appendices

- 1. Council snapshots
- 2. Project Team Biographies
- 3. Criterion definition, priority and risk assessment
- 4. Blank MCA Framework
- 5. Evaluated MCA Framework
- 6. Peer Review Letter from Castalia
- 7. Water Infrastructure Reform Planning Report
- 8. Gravel Road modelling for Wairarapa councils



ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024

Appendix 1

WATER SERVICE DELIVERY OVERVIEW

Masterton District has an area of 229,500 hectares (2,295km2), with a population of 29,849 – projected to rise to 44,000 by 2054. The main urban area is Masterton, located between the Waingawa, Waipoua, and Ruamāhanga rivers.

Water asset information (current state) Treatment plants Reticulation



Compliance issues

Water supply - treatment plant monitoring regime in place.

Wastewater - Significant compliance requirements relating to wastewater treatment, land disposal, and discharge to Ruamāhanga River.

Stormwater - Global stormwater consent – compliance to be determined.

Water challenges and projects for the next 10 years

Туре	Challenges	Top priority projects
General three waters	 Meeting population growth Resource consent renewals Climate change impacts Affordability of levels of service 	
Water supply	 Raw water storage dam construction Trunk main renewals Compliance with new regulatory requirements Improving pressure in some suburbs Increased water storage Transition to charging by metered usage 	 Water storage dam Water main trunk replacement Reticulation renewal programme
Wastewater	 Understanding current state Expiry of Homebush Wastewater Treatment Plant consents in 2034 Upgrades need to meet new consent requirements as per NPS Freshwater – currently uncertain Network capacity, reduction of ingress and infiltration 	 Sewer reticulation renewals (ingress and infiltration reduction) Homebush land-based irrigation system upgrade
Stormwater	 Areas of flooding across district – history of extreme weather events Consideration of increasing design standards to meet climate change challenges 	• Enhanced operations and maintenance for stormwater to prevent localised flooding

10-year pipe replacement programme

Water supply - 24km in 10 years (2.4km per year) Wastewater - 20km - 30km in 10 years (2-3km per year) Stormwater - 6km in 10 years (0.6km per year)



Item 7.1 - Attachment 7

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f @MastertonDC



ASSET MANAGEMENT PLAN 2024 – 2034

ASSET INFORMATION

WATER

- 71km of Water Supply Pipes
- 2 Water Treatment Plants ٠
- **1** Water Pump Station

WASTEWATER

- 48km of Wastewater pipes •
- 1 Wastewater Treatment Plant
- 17 Wastewater Pump Stations ٠

STORMWATER

- 34km of Stormwater Pipes
- 535 Stormwater Sumps
- No Stormwater Pump Stations

RISKS AND ISSUES

WATER

- Assets at the end of service life
- Regulatory changes
- Water losses from the network
- Hazardous pipe materials ٠
- **Population Growth**

WASTEWATER

- Assets at the end of service life
- Inflow and Infiltration
- **Regulatory changes**
- **Population Growth**

STORMWATER

- Resilience against flooding and extreme weather events (Climate Change).
- Increasing Urbanisation of pervious • catchments
- **Regulatory changes**

WATER

- - Nitrate-Nitrogen Management
 - Assets

WASTEWATER

STORMWATER



Item 7.1 - Attachment 7

ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024

PRIORITY PROJECTS

Network Renewals Backflow Prevention Upgrade Kaipatangata Surface take consent renewal

Seismic Resilience Upgrades on Critical

Network Renewals Treatment Plant Headworks Upgrade **Desludging of Oxidation Ponds**

Network Renewals and Upgrades **Discharge Resource Consent**








ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024

Overview of South Wairarapa District Council's Three Waters Renewals

Handout for Activity 1: Getting the renewal level right (Workshop 21 September 2023)

VALUE OF SOUTH WAIRARAPA'S THREE WATERS ASSETS

Optimised Replacement Value of SWDC's three waters assets*:

TOTAL Three	Waters \$148M	
Stormwater	\$11M	
Wastewater	\$48M	
Drinking Wate	er \$90M	

*Optimised Replacement Value reflects the current and most economic cost of replacing an asset that provides a similar level of capacity and/or service.



6 Reservoirs & Tanks, \$5M 6300 Fittings (valves, hydrants etc), \$5M

Figures based on:

- March 2023 Asset quantities •
- SWDC 2022 Valuation update (WSP)

YEAR-ON-YEAR RENEWALS INVESTMENT





% Non-critical	74%
Length needing replacement within the next 30 years (excl. laterals)	77.2km (37%) (~\$147M)
Average replacement length needed per year (excl. laterals)	2.6km (~\$5.046M)

Pump	Stations	(all	waters)	

Renewals Backlog	\$1.08M
Renewals required within the next 30 years (incl. backlog)	\$2.453M

CONDITION 100% of SWDC's three waters pipe network has had a criticality assigned and condition assessed either via physical or desktop assessment. **Critical Assets** 4% 8% 10% **Critical drinking** water pipes (% of 14% total length) 64% 2% 0% 12% **Critical** wastewater pipes (% of total length) 86% 0% 4% Critical 35% stormwater pipes (% of total length) 61% 0% 20% Reservoirs (5) 40% Note, reservoirs based on structural assessment and excludes contamination 40% risks





Our water, our future.



Three Waters: Water, Wastewater & Stormwater

Overall data confidence and reliability rating: Medium to high : Council has an overall average data confidence score of 71.7/100 (100 is excellent).

Water Supply: Seven treatm	ent plants	Wastewater System: Seve	en treatment sites	Stormwater System: Four t	own systems
Water treatment varies between s	schemes, including:	Wastewater is treated includin	g:	The stormwater network incluc	ling:
Chlorine, multimedia, microfiltrat combinations of these, comprising	cion, ultraviolet, and g:	Screening, removal of dissolv aeration, microfiltration, and discharged to land and/or discharging to the ocean, comp	ved solids, ponds and ultraviolet. It is then waterways, ultimately orising:	An urban network of pipes and operate to safely direct stormv streams and to the ocean, com	open channel drains vater (SW) to inland prising:
 267 kilometres of water s 47 kilometres of laterals 8 water intakes including .14 reservoirs, 1 pump state 	upply pipelines 2 bores ation	 95 kilometres of waste 1,100 maintenance ch 21 sewer pump station 	ewater pipeline ambers ns	 28 kilometres of stormwa 26 kilometres of open cha streams 1,160 maintenance chami 	iter pipelines innel drains and bers and sumps
Kantadari Kanina Cherlentiam Colytan Multione Administ Refor Turten Data Balance Turten Data Kaneno Turten Data Kaneno Turten Data Kaneno Turten Data Kaneno	Norspinod damae Trion Watakara Weber Compos Compos	Kimbolton nham Pohangina Maharahara Aaphurst Ballance Ballance Ballance Ballance Ballance Traun	Nors twod Orms. dville Matmau Dam rike Waitanora Waitanora Waitanora Waitanora	Kimbolton Kiwitaa enham On Pe Ashhurst Woshille Kumeroa Ballance Pe ua Pe ua	Norsewood Ormondville Matamau Dann mke Te Uri Waliahora Weber Walone Pongaroa
	Ten-year rei	newal programme 2024/2	5 to 2033/34 – leng	gth, in metres	
Water Renewals		Wastewater Renewals		Stormwater Renewals	
Summary	Length (metres)	Summary	Length (metres)	Summary	Length (metres)
1 Dannevirke	42,106	1 Dannevirke	10,513	1 Dannevirke	2,180

Replacement Value (\$ Millions @2023)

Replacement Value

3

ned replacement value

as @ 30 June 2023 \$284M

m	Area	4
	Population	
*	Residential Properties	
-	Residential water connections	
a	Non-residential connections	
•	Greenhouse Emission Targets	





Water Supply - Below Ground Asset Condition



Excellent Good Average Poor Very Poor

Stormwater - Below Ground Asset Condition



_		-	_	-	_				
Ten	Vear	Cost	Forecasts	-long	Term	Plan	(fully	/ audited	1
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42,106

17,452

4,044

1,674

65,377

102

2 Woodville

4 Eketahuna

Total Wastewater Renewals

3 Pahiatua

1 Dannevirke

2 Woodville

4 Eketahuna

5 Norsewood **Total Water Renewals**

3 Pahiatua

All Three Waters and Locations	
To meet additional demand	Growth
To improve the level of service	Level of Service
To replace existing assets	Renewals
This Draft Long-Term Plan	



2 Woodville

3 Pahiatua

4 Eketahuna

Total Stormwater Renewals

512

1,638

1,175

5,504

3,772

3,419

17,785

80

ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024



Wastewater - Below Ground Asset Condition





ORDINARY COUNCIL MEETING ATTACHMENTS 13 NOVEMBER 2024

Appendix 2



CONTACT

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LINKEDIN https://www.linkedin.com/in/johanneskleinjan-ferreira-597a9570/

JOHANNES FERREIRA

KEY SKILLS

- Leadership
- Programme, Project & Contract Management
- Procurement Procedures
- Complex problem resolution
- Strategic Planning, Execution & Delivery
- Operations Management (asset management, long term planning, policy, process, funding applications, audit.)
- Confilct Mangement
- Collaboration

EXPERIENCE

- Over 5 years' experience working in Local Government service delivery.
- Over 2 years' experience working on Governments Water Reforms
- 8 years' experience in Constuction management

Infrastructure Services Manager – Carterton District Council – April 2022 to Present.

Road Network Operations, Carterton District Council Nov 2021 – April 2022

Manager Maintenance and Operations Engineering - Transport, Porirua City Council Mar 2021 - Nov 2021

Maintenance Project Engineering, Porirua City Council Aug 2019 - Mar 2021

GOVERNANCE

 Wairarapa Engineering Lifelines Association – Deputy Chair (April 2022 – Present).





CONTACT

PHONE: 021-905-256

LINKEDIN https://www.linkedin.com/in/maseinakoneferenisi-a8620817/

MASEINA KONEFERENISI

KEY SKILLS

- Collaboration
- Leadership
- Governance, performance monitoring and reporting
- Strategic Planning, Execution & Delivery
- Business acumen running company client mngt, finance, audit, risk, HR, H&S, compliance, marketing, org structures, legal, contracts, quality assurance.
- Operationalising strategy
- Programme, Project & Contract Management
- Operations Management (asset management, long term planning, policy, process, funding applications, audit.)

EXPERIENCE

General Manager, Infrastructure & Assets – Masterton District Council – February 2024 to current

Regional Establishment Director, Water Reform - Department of Internal Affairs, National Transition Unit – June 2023 to February 2024

Chief Executive Officer, Lutra Ltd (water & ww processing & software company) August 2021 to June 2023

Chief Operating Officer, Lutra Ltd – February 2020 to August 2021

Product Manager, Lutra Ltd – February 2016 to February 2020

Principal Advisor, Business Performance, Wellington Water Ltd, -2014 - 2016

Assets Manager, Greater Wellington Regional Council, - 2012 - 2014

Water Services Manager, Horowhenua District Council, - 2010 - 2012

Bulk Water Assets & Compliance Team Leader, Greater Wellington Regional 2002 – 2010

Network Manager (Wellington reticulation, Greater Wellington Regional Council – 1997-2002





CONTACT

PHONE: 027 280 7297

PETER WIMSETT

KEY SKILLS

- Innovative
- Proactive
- Leadership
- Governance
- Project management
- Business expertise finance, audit, risk, HR, climate change, marketing, technical support, modelling.
- Operations management (long term planning, strategy, audit, treasury).

EDUCATION

- Chartered Accountancy
- Bachelor of Business Studies Finance

EXPERIENCE

- Chief Adviser of Tararua District Council. Also held roles of Manager of Corporate Services, Strategy, District Development (marketing), Climate Change, and Three Waters Transition Manager.
- Local Controller for civil defence emergencies and current Manawatu-Whanganui Regional Chair of Lifelines, representing essential infrastructure of the private and public sectors.
- Associate of the **Institute of Directors** providing support to the regional climate change committee and representation on the region's shared services company.
- New Zealand Strategy Representative to the software supplier Civica (International) on its advisory panel for local government – software development, project lead for rating and banking, development of asset management GIS integrated system.
- Risk Management Advisory Group to Local Government New Zealand advising on risk management improvement, developing national climate change risk assessment, development of national framework for water services incidents and emergencies.
- Providing technical support to the South Pacific through the Pacific Technical Assistance Programme, funded from the Ministry of Foreign Affairs and Trade, New Zealand Aid Programme and managed by Taituarā. Adviser to mayors of the capital cities of the South Pacific, visited Vanuatu to share local government experience and knowledge, and heavily involved in improving Port Vila City Council's revenue collection, IT and financial services.
- Liaise with both lwi in Tararua on behalf of council and actively involved in current iwi-council projects.

ACHIEVEMENTS

- Recipient of a local hero New Zealander of the Year award.
- Received awards on behalf of Council for innovation for local government and from the telecommunications industry for developing ultrafast broadband prior to Government initiatives.
- Led a team that won **New Zealand Project of the Year** for Information Management, also a finalist for a multiple-town high-definition CCTV security crime prevention system for public safety.



robyn Wells

CONTACT

PHONE: 027-444-2875

KEY SKILLS

- Leadership
- Governance
- Complex problem resolution
- Business expertise running companies
- Project, Contract & Program Management
- Stakeholder management

EDUCATION

- Bachelor of Science Microbiology Massey University Palmerston North, New Zealand
- Master of Science Applied Microbiology Queensland University St. Lucia Brisbane, Australia
- Master of Business Administration Degree The College of William and Mary, Williamsburg, VA, USA

EXPERIENCE

- Over two years' experience advising local authorities on water service reform and managing relationships with Council Controlled Organisation Wellington Water Limited
- Eleven years' experience as a Chief Executive based in New Zealand delivering projects of regional significance in rural areas
- Three years as an **Executive Vice President Operations** in a US based renewables business, 51% owned by Investec and 49% by a farmer cooperative with annual revenues of US\$450million
- Six years progressing to National Operations Manager within Australian listed conglomerate CSR Limited within the Ethanol division with responsibilities for multiple sites including a liquid fertilizer business
- Three years as General Manager of a Minnesota based, farmer owned LLC producing ethanol and animal feed products from grain fermentation
- Early career experience in research and commercialisation of fermentation technologies and fuel ethanol plant start-ups in Australia and the USA

GOVERNANCE

- Invited as Independent Chair Island Cliff Dairy, November 2011 to May 2013 (capital value \$10-\$12 million)
- Appointed Director to Waitaki Irrigators Collective, October 2011
 to May 2019 (Remuneration and review subcommittee)
- Elected and then Co-opted Director to Irrigation New Zealand, November 2016 to November 2020 (Audit and Finance committee)
- Appointed as Independent Director to Regen Limited, May 2019
 to July 2019
- New Zealand Institute of Directors Achieved Certificate of Company Direction, March 2017
- University of Virginia Darden School of Business Executive Education Program, 2018

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1 Amprove during training t	I	Criteria	Poor 0 - 30	Good 31- 60	Excellent 61-100	Criticality	Definition	Risk we need to address is that:				
Description Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	1	Average price adjustment on day 1	>20%	10-15%	<10%	Low	The adjustment required on day one to ensure no debt shortfall / or amount of debt shortfall, if any	There is price shock for consumers				
2 Martine 4 Byorth Markage bases	-		1.2010	10 10/0	-10/0	2011						
Image: Note:	2		Annual price increase	10% Annual price	Annual price increase		Rate of annual increase in nominal / real % terms after initial					
P P <td></td> <td>Medium Term - 4 - 10 years FA</td> <td>10%></td> <td>increase</td> <td><10%</td> <td>High</td> <td>adjustment (if any)</td> <td>Water services are judged to be unaffordable by consumers</td>		Medium Term - 4 - 10 years FA	10%>	increase	<10%	High	adjustment (if any)	Water services are judged to be unaffordable by consumers				
Note with the section of the	3	Long Term 10 20 EA	Annual price increase	10% Annual price	Annual price increase	High	Rate of annual increase in nominal / real % terms after initial					
A Private Part Part Part Part Part Part Part Part		Long Term 10 - 30 PA	10%	nicrease	<10%	High	Indicates the percentage of debt paid back each year, and thereby, the					
5 Instruction of the section of the sectin of the section of the s	4	Free Funds from Operations (FFO) / Debt to Revenue Ratio	>15%	9%-15%	>9%	High	number of years to pay debt back	Lenders look poorly on ability to repay debt unless revenue increases				
Image: Construction, doi:10.1111/10.11111.1111.1111.1111.1111.11	5		1				The debt levels proposed are fundable at good interest rates as					
A Name Notice of the state		Borrowing capacity - debt cap - can we borrow enough ay favourable rates	Less than BBB	BBB+	AA+	High	measured by the S&P ratings handbook	A lower rating means higher interest rates or debt shortfall				
Outcome resultPricePric	6	Door the model reflect reasonable officiency (rick with accuming efficiency)	Agrociuo	Passoanbla	No	Madium	The year after establishment we expect to start seeing efficiencies,	Efficiency has been overestimated				
7 Examinence		Des tre moder reliect reasonable enriciency (nak with assuming enricency)	Aggressive	Approx.	NO	riediditi	Cost per customer - cost for setting up the new entity that fall on the	Enciency has been overestimated				
Image: Image: Substray Substray<	7	Establishment cost	>\$200/customer	\$125/customer	\$75/customer	Low	entity	There is price shock for consumers for establishment				
IndustryExhappyExhappyExhappyNotePrint	8						Cost per customer - Cost that fall on individual council because of					
9 Consistion of the second s	-	Transition Cost (cost on council) - not assessed as yet	\$20/ratepayer	\$10/ratepayer	\$5/ratepayer	Low	transition	That rates will be impacted more than anticipated in the current LTP				
Image: Construction Partial for the second of	9	Complexity and time of transition	Difficult and over 3 years	Medium 2 years	Simple 1 year	Medium	A qualitative assessment of the negotiations and complexity to work through in establishment phase	That there will be increased transition costs and delayed efficiencies				
Image: construction Outlet Outlet Outlet (Construction) Outlet (Construction) Outlet (Construction) 1 Augeordenesses training:		LEVEL OF SERVICE						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
1 Improving stands		Criteria	Poor 0 - 30	Good 31- 60	Excellent 61-100	Criticality						
Image decision of bala inspace decision space data set	1											
2 Rafe or nog disation on Pailuly PA Pig mage constrained second by here below: Description Descript		Responsiveness to faults	no	partially	yes	High	Will response times improve	Delayed or insufficient response will be experienced by residents				
And the production will have been service and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And they are arrive and they fur our cutations And the area arrive and they fur our cutations And the area arrive and they fur our cutations And the area arrive and they fur our cutations And the area arrive and they fur our cutations And the area arrive and the arr	2	Funds for major disasters	no	Partially	VPS	High	major disasters as expected by the Minister	Delayed or insufficient recovery will be experienced by residents				
3 Probability well increase levice stationy for or quantum endoce same a impore low mean a builty construct discing in present COS Production	2		1	,	,		The expectation is that LOS are maintained. However, in some models					
4 Authy to cart to Condit operation approximate appr		Probability we will increase service delivery for our customers	reduce	same as	improve	Low	there is a turnaround strategy to increase LOS	Poor service will be experienced by consumers				
Dath for claster or commany Operation Operati	4						Does the operating model enable delivery of the growth strategy					
5 Apply to adapt/adjust/autom/moveded.extechmanage ink operation 4 - 5 levels Jevels Medium Personamentation Apply to adapt/adjust/autom/moveded.extechmanage ink Apply to adapt/adjust/autom/moveded.extechmanag		Ability to cater for Growth	- NO	partially	yes	High	(operationally) Ability to make decisions and influence change will be impacted by a	Inat the District's growth plans cannot be delivered				
L L	5	Agility to adapt/adjust/ learn/improve/decide/manage risk	operations	4-5 levels	3 levels	Medium	more bureaucratic organisation	frustration				
6 6 Portage of the second sec			1									
Regionalization Regionaliz	6						Will the model improve responsiveness to emergencies due to access					
Outwork Description Processes Control Processes Control Processes Control Processes Proc		Responsiveness to emergencies / Civil Defense	no	Partially	yes	High	to resources, local knowledge and key capability like Hood aerodrome	Delayed or insufficient response will be experienced by residents				
1 Pocurement - resource availability Restricted task hat 5% reduction in price Available task hat 5% reduction in price Available task hat 5% reduction in price High analytic Compares of scale - attractiveness to market / creating more interest. Who at being attractive beth market, www mark telwe betavale 3 Pocurement - buying power No chance Might attract Will attract module Might attract Might attract module Might attract module 4 Staff - Can attract, recruit and retain right people 20% under market rates Attract Might attract module Might attract module Might attract module 5 Manging risk of critical roles No chance Might attract UNIX Might attract Might attract <t< th=""><th></th><th>Criteria</th><th>Poor 0 - 30</th><th>Good 31- 60</th><th>Excellent 61-100</th><th>Criticality</th><th></th><th></th></t<>		Criteria	Poor 0 - 30	Good 31- 60	Excellent 61-100	Criticality						
· Procurement - recorder availability Procurement - bying power Procurement - broadle economic outcomes Procurement -	1											
2 Pocurement - buying power less that 5% reduction in price D% reduction in price D	1	Procurement - resource availability	Restricted	Available	Competitive	High	Economies of scale - attractiveness to market / creating more interest	Without being attractive to the market, we won't achieve best value				
Procurations: production productin production production pr	2	Description of the second seco	less that 5% reduction in	For an developming to part of	400/		Economy of scale resulting in better supplier pricing and quality					
3 Rocurement-broader economic outcomes No chance High attract Mel attract Index Mel attract Mel attract <th< td=""><td></td><td>Procurement - buying power</td><td>- pnce</td><td>5% reduction in price</td><td>10% reduction in price</td><td>medium</td><td>Attract wondore from outside district to establish local presence with</td><td>without being attractive to the market, we won't achieve best value</td></th<>		Procurement - buying power	- pnce	5% reduction in price	10% reduction in price	medium	Attract wondore from outside district to establish local presence with	without being attractive to the market, we won't achieve best value				
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Start - Can attract, recruit and retain right people 20% under market mask market 10% over market market <	4		IND CHAILCE	Might attract	Will attract	medium	local skill and expertise.	We won't get the best quality tender on projects				
5 Managing risk of critical roles Inability to immediative coverage for interact of the same of the s	4			Might attract	Will attract	medium	In the second se	We won't get the best quality tender on projects				
J Managing risk of critical roles Managing risk of relations Managing risk risk of relations Managing risk risk of relations Managing risk risk risk of relations Managing risk risk risk risk risk risk risk risk	r	Staff - Can attract, recruit and retain right people	20% under market rates	Might attract At market	Will attract 10% over market rates	medium High	Ability to pay competitive remuneration packages and provide interesting work with development opportunities	We won't get the best quality tender on projects We Cannot attract quality staff				
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1			Partial support with		1		
-	lwi support	No support	concerns	Fully support	High		
			Relationships have				
2			been form on				
2			agreements, some	Direct whakapapa to		Criteria developed by ini	Rick seeacod by just
	Whakapapa - genealogical links	No historical whakapapa	whakapapa links	same line descent	High	Cinteria developed by init	Tusk assessed by twi
3	Te mana o te wai - the life force of water	Limited mana	Mana	Strong mana	High		
4	Enabling of Te Tiriti o Waitangi	Limited mana	Mana	Strong mana	High		
5	Mana motuhake - identity, self determination	Do not identify	Some identity	Strong identity	High		
6	Mauri - life fore /peoples interaction with the wai	No connection / impact	Connection / impact	Strongly connected	High		
7		1				Do economic benefits such as local jobs and businesses growing	
/	Does it create an economic benefit to the community?	No	Partially	Yes	Medium	accrue	The community does not believe the arrangement creates any value
		1					
8	Accountability and performance monitoring is clear and meaningful (an effective						
	working relationship and can show mechanisms to the community)	No	Partially	Yes	Medium	Do customers feel they are getting value for money	The community does not believe the arrangement creates any value
	STRATEGIC						
	Criteria	Poor 0 - 30	Good 31- 60	Excellent 61-100	Criticality		
1						Will the model allow the provincial strategies to get some priority	
1	Influence of strategic direction for district	Low confidence	Medium confidence	High confidence	High	within the overall strategic direction of the entity	Our district feels constrained or deprioritised
2			Reasonably easy to			Can the structure be navigated with ease to see who the decision	
2	Transparency and clarity	Lots of tiers and complexity	/ navigate	Simple to access	Medium	makers are	Our communities feel disconnected to the delivery entity
2	Alignment with other regional initiatives e.g. water resilience, water storage (treated and	No alignment / competing		High alignment /		Alignment will enable an integrated and holistic approach to key	
,	raw), Moana Statutory Board	priorities	Some alignment	aligned priorities	Medium	initiatives related to water	Our important initiatives are not advanced or supported
4						Does the model preclude or encourage a strategic approach e.g. future	
	Future optionality	Precludes	Possible	Encourages	Medium	service contracts or other councils joining over time	We cannot grow and adapt in how we deliver water services
	LEGISLATIVE						
	Criteria	Poor 0 - 30	Good 31- 60	Excellent 61-100	Criticality		
	1 Supports meeting relevant regulatory quality standards - Yes/No	No	Partial	yes	High	December of the extension of a support achievement of the exiteria	
1	2 Shows reaching Financial sustainability by 30 June 2028 - Yes/No	No	No	Yes	High	required in any WSDB to be accepted by the Minister	WSDP will not be accepted
1	la construction of the second second	Les la construction de la constr			land a	required in any woor to be accepted by the Minister	
	3 Supports meeting drinking water quality standards - Yes/No	No	Partial	yes	High		
	3 Supports meeting drinking water quality standards - Yes/No Supports housing growth and urban development commitments made by Council -	No	Partial	yes	High		



Score Collation

	Financial	Levels of Service	Operational	Relationships & Trust	Strategic	Legislative Requirements	Weighted Score TOTAL	RANK
Weighting	25%	20%	15%	20%	10%	10%	100%	
Regional (10 councils)	0%	0%	0%	0%	0%	0%	0%	1
Status Quo	0%	0%	0%	0%	0%	0%	0%	1
Option 2	0%	0%	0%	0%	0%	0%	0%	1
Option 3	0%	0%	0%	0%	0%	0%	0%	1
Option 4	0%	0%	0%	0%	0%	0%	0%	1
Option 5	0%	0%	0%	0%	0%	0%	0%	1
Option 6	0%	0%	0%	0%	0%	0%	0%	1

The cells in yellow are input cells



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Long Term 10-30 FA	Annual ance monote 22%	10% Renautorice Increase	Annual page monoter (12%)	Halb.		6.24		e 4.		as.			en:			05			01			05			on	
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Score Collation

	Financial	Levels of Service	Operational	Relationships & Trust	Strategic	Legislative Requirements	Weighted Score TOTAL	RANK
Weighting	25%	20%	15%	20%	10%	10%	100%	
Regional (10 councils)	57%	33%	46%	23%	37%	63%	42%	6
Wai + T	56%	68%	67%	92%	70%	75%	70%	2
MDC alone	29%	66%	68%	35%	76%	81%	54%	3
CDC alone	29%	66%	63%	35%	76%	81%	53%	4
SWDC status quo	26%	38%	45%	34%	38%	60%	38%	7
TDC alone	26%	66%	67%	35%	76%	81%	52%	5
Wairarapa only	54%	71%	70%	88%	76%	75%	71%	1





Thinking for a better world.

Wai + T Water Restructuring Evaluation Criteria Review

11 October 2024

Executive Summary

The Wairarapa (Masterton District, Carterton District, and South Wairarapa District Councils) and Taraua District Council (together Wai + T) are considering their options to jointly deliver water, wastewater, and stormwater services. This follows the Government passing the Local Government (Water Services Preliminary Arrangements) Act 2024 and policy announcements regarding the future legislative settings. There are several options for water services delivery being considered, including, a 10-council option, councils delivering water services on a standalone basis, and a Wai + T option.

The team advising Wai + T council executives has created evaluation criteria to evaluate the options for restructuring. It has asked Castalia to review these evaluation criteria using local and international best practice.

In this report, we address whether Wai + T's evaluation criteria are robust and how they can be improved.

Wai + T are following a robust policy process

When considering important decisions like how to improve water service delivery, councils should follow a standard policy process. A standard policy process should state the objective the councils are trying to achieve, develop a theory of change around the outcome sought, establish criteria to evaluate the options, and involve stakeholders to develop a consensus on the option best suited to the council's needs and objectives. It is good to see that the Wai + T team has adopted this approach for its initial stages (before stakeholders in the community are consulted). Wai + T's process should support robust decisions.

Wai + T's evaluation criteria support sound decision-making...

Taken in totality, the Wai + T criteria provide council decision-makers with a robust framework for assessing restructuring options. Applying the Wai + T criteria will enable councils to understand the pros and cons of different options and reach a sound decision.

We typically use six high-level criteria because these break down the key parameters for success distinctly from one another. Our criteria have been developed during major water sector reforms in several countries, and have been adopted by the New Zealand Government during the Local Water Done Well policy development process. The six Castalia-recommended criteria are:

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- Maximising available economies of scale and scope
- Improving access to financing
- Lifting management and operational capability
- Flexibility to future change
- Improving incentive alignment
- Ensuring accountability to owners/customers and stakeholders.

These six criteria enable decision-makers to understand how each criterion affects the outcomes sought. There is significant alignment between Wai + T's criteria and how Castalia would evaluate reform options. Castalia's criteria differ somewhat, but overall cover the same matters.

... but we suggest some improvements for the next stage

Wai + T's criteria have some overlap with one other. Because of this overlap and some repetition, they may over-weight some factors over others.

We understand that Wai + T councils will consider more detailed design options for water restructuring/reform in the next stage. We recommend you make some minor changes to your evaluation criteria in this next stage to address the small degree of overlap and repetition we identify. This will ensure that the criteria are weighted appropriately and consider all factors for delivering safe, resilient, customer-responsive water services at least cost.

We recommend that Wai + T align its evaluation criteria with Castalia's approach across several areas. These are set out in detail in section 5 of the report:

- Financial: Split the criteria into access to financing and economies of scope and scale as this will provide appropriate weighting for each factor
- Level of service: When assessing how levels of service will change, separate out separate the alignment of governance and management's incentives from how management and operational capabilities will lift.
- Operational: Take care including economies of scope and scale here because size does not necessarily lead to improved operations
- Relationship and trust: Consider how accountability to owners, customers and stakeholders can be incorporated
- Strategic: Consider assessing accountability to customers and owners separately from how the entity option is flexible to future change.

1 Introduction

This report is structured as follows:

- We present Wai + T's evaluation criteria (section 2)
- We outline Castalia's recommended parameters for Local Water Done Well options analysis (section 3)
- We evaluate Wai + T's criteria against Castalia's recommended approach (section 4)

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Finally, we conclude and provide some recommendations for your next steps (section 5).

2 The Wai + T evaluation criteria

According to Wai + T's preliminary results, joint delivery will lead to some financial benefits, and the Wai + T option will improve relationships and trust. Still, the Wairarapa-only option is ranked highest.

While Wai + T has a theory of change, it is often not obvious which institutions will produce which outcomes, creating a risk of faulty reasoning. Therefore, it is helpful that Wai + T has developed criteria to evaluate the options available on a consistent basis. This will help Wai + T to reach a robust conclusion on the best option for regional water services.

The Wai + T project team has developed evaluation criteria with six key parameters: financial, level of service, operational, relationship and trust, strategic, and legislative. Each parameter includes weighted evaluation criteria to be scored out of 100.

Financial

This parameter includes criteria that will impact consumer affordability. It includes nine evaluation criteria: average price adjustments on day one, in the medium term, and in the long term, free funds from operations, borrowing capacity, whether the model reflects reasonable efficiency, establishment cost, transition cost, and the complexity and time of transition.

Level of service

This parameter includes criteria that evaluate customers' experience. It addresses the delivery entity's responsiveness to faults, funds for major disasters, increased delivery service for customers, ability to cater to growth, agility to adapt and improve, and responsiveness to emergencies.

Operational

The operational parameter evaluates the efficiencies and opportunities for districts. The operational parameter evaluates 11 criteria, including the procurement of resource availability, buying power, broader economies outcomes, attraction and retention of staff, managing risks of critical roles, spatiality logical, network similarity and connectivity, operational efficiency, values and culture, stakeholder relationship cost, and systems complexity and scale.

Relationships and trust

Ease to set the right values and culture to drive performance in the organisation and align with the Māori view. The relationship and trust parameter includes six criteria developed by Iwi and two criteria relating to the delivery entity's economic benefit to the community and the delivery entity's accountability and performance monitoring.

Strategic

This parameter will evaluate the achievement of the district's strategic goals. The strategic criteria evaluate the influence of strategic direction, transparency and clarity, alignment with other regional initiatives, and future optionality.

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Legislative

The legislative criteria evaluate whether the proposed arrangement supports achieving the criteria required in any Water Service Delivery Plan (WSDP) to be accepted by the Minister.

3 Important parameters for Local Water Done Well

Castalia has advised the Government on implementing Local Water Done Well. Mr. Andreas Heuser was the chair of the technical advisory group. We have also advised Local Government New Zealand (LGNZ) on important parameters for evaluating reform options. Castalia has developed six parameters of our own to assess water reform options. We have provided these to DIA, and they are informed by local and international reform experience.





3.1 Maximising available economies of scale and scope

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.

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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.

3.2 Improving access to financing

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. 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.

3.3 Lifting management and operational capability

Capable and sophisticated management and operations occur 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.

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.

3.4 Flexibility to future change

Flexibility and adaptability to change following new information are desirable in water service providers. While water services are generally long-lived and high capital-cost businesses, technology, customer preferences, and society's expectations can change. For example, growth or decline can change investment needs. Society's environmental expectations can change, such as changes in historical attitudes to discharge waste into the environment. These changes or new information require water services to adapt in response.

Providers that are closer to customers can generally adapt more easily due to better local knowledge and understanding. Institutional settings can also ensure dynamism and responsiveness to customer demands 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.

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3.5 Improving incentive alignment

This parameter 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.

3.6 Ensuring accountability to owners/customers and 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.

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4 Castalia's evaluation of Wai + T criteria

We evaluate Wai + T's criteria alignment with Castalia's standard approach in the table below. This table aligns the Wai + T evaluation criteria with the six important parameters Castalia developed to assess water reform options. We then provide our comments on the alignment.

Table 4.1: Castalia's ev	aluation of the Wai + T criteria	
Wai + T evaluation criteria	Equivalent Castalia parameter	Comment on alignment
Financial	Access to financing Economies and scope and scale	Castalia separates Wai + T's financial evaluation criterion into whether the proposed restructuring will realise cost savings to the council through economies of scope or economies of scale. Wai + T's financial criterion include relevant metrics that indicate whether economies of scale will be achieved.
		Access to financing refers to the ability to readily access capital to pay for investment and operations. Access to financing can be achieved through various means, and is not necessarily related to financial cost-savings.
Level of Service	Alignment of incentives with objectives	Castalia separates Wai + T's level of service criterion into Castalia's aligning incentives with objectives, and operations and management capability parameters.
	Management and operational capability	Alignment of incentives with objectives encompasses Wai + T's service, response, and recovery concerns. It is important to consider how a reform option means those people in governance and management are incentivised to:
		Deliver the level of service desired
		Accommodate growth
		Respond to emergencies
		• Be agne.
		Castalia's operation and management capability parameter would include Wai + T's sub-criteria for the delivery entity's agility to adapt and adjust. The level of responsiveness to emergencies would also be included. This would ensure sufficient weighting to the models' improved ability to respond to emergencies and growth.

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Operational	Economies of scope and scale Management and operational capability	The operational criterion aligns with two of Castalia's parameters: maximising economies of scope and economies of scale, and lifting the capability of operations and management. Castalia splits Wai + T's operation evaluation criterion to recognise the different outcomes from economies of scale and the changes in operations and management capability.
		Wai + T's procurement of resource availability, buying power, and broader economic evaluation criteria align with Castalia's economies of scope and economies of scale parameter. Larger organisations can lift operational performance, but there are other ways that operational performance can be lifted. Organisations can also get too big, and have diseconomies of scale. Separating Wai + T's economies of scale criterion will ensure any cost savings through economies of scope and scale are weighted correctly.
		There are several ways organisations can lift operational and management competence. Wai + T's operational sub- criteria include relevant metrics that evaluate this, including managing risk of critical roles, operational efficiency, and values and cultures. However, there are several ways to lift operational performance that are separate from the size/scale (for instance outsourcing or sharing resources). Therefore it would be best to separate this criterion from considerations of size.
Relationship and Trust	Accountability to owners and customers	Wai + T's relationships and trust criterion largely align with Castalia's accountability to owners and customers parameter. Castalia's criteria include further evaluation of institutional operations to give customers and communities accountability over the price and quality of water services.
		Hapu and iwi are important stakeholders and owners/holders of rights and interests in water sources and the receiving environment for treated wastewater. When applying our accountability to owners and customers criterion, we also include accountability to hapu and iwi.
Strategic	Accountability to owners and customers Flexibility to future change	Wai + T's strategic criterion overlaps Castalia's accountability to owners and customers and flexibility to future change parameters.
		Wai + T's transparency and clarity evaluation criterion aligns with Castalia's criteria for evaluating institutional options to give customers and communities accountability for price and quality preferences in water services.
		Wai + T's evaluation of future optionality aligns with Castalia's flexibility to future change parameter. This parameter evaluates the delivery entity's ability to preserve the option for water services to change size and form over time.



Legislative	Alignment of incentives with objectives	Wai + T's legislative criterion can be aligned with Castalia's alignment of incentives with objectives parameter. Castalia's alignment of incentives with objectives parameters will provide an evaluation of how long-term capital investment and other objectives are incentivised.
		This encompasses Wai + T's concerns over whether the proposed arrangement supports achieving the criteria required in any water services delivery plan (WSDP) to be accepted by the minister.



5 Conclusion and suggested next steps

Taken in totality, the Wai + T criteria provide council decision-makers with a robust framework to assess restructuring options. As set out above, we typically use the six high-level criteria because these break down the key parameters for success distinctly from one another. The Wai + T criteria overlap to some extent. The overlap and some repetition mean that some criteria may be over-weighted. However, on balance, we think applying the Wai + T criteria will enable councils to understand the pros and cons of different options and reach a sound decision at this stage.

We understand that you will refine the option design for Wai + T water service delivery further in the coming months. As you refine the approach to joint service delivery, we suggest that you could assess your options considering the following advice:

Financial

We suggest splitting Wai + T's financial evaluation criterion into Castalia's access to financing and economies of scope and scale parameters to reflect the appropriate weighting for each criterion. Access to finance considers the delivery entity's ability to access financing through debt or equity. It is important to consider the cost savings through economies of scope and economies of scale separately to a water entity's ability to access financing

Level of service

We suggest changing Wai + T's level of service evaluation criterion in line with Castalia's approach. Level of service can be lifted by aligning incentives of those in governance and management positions with objectives, and separately by lifting capability of management and operations. Aligning the delivery entity's objectives with incentives is an important measure to ensure that those charged with governance and management of the water service make decisions that achieve the overarching objectives. Management and operations capability is an important measure of the delivery entity's employee performance and professionalism to ensure excellent service and the entity's level of responsiveness to emergencies.

Operational

We suggest addressing operational improvements in line with Castalia's approach and use separate criteria to assess this.

Maximising available economies of scope and economies of scale can reduce operating costs. Economies of scope and economies of scale consider the cost savings achieved through growing the entity, outsourcing staff, or management.

The parameter lifting management and operational capability zeroes in on how a particular option for change may lift capability and improve the entity's performance and efficiency.

Relationship and trust

We suggest Wai + T's relationship and trust evaluation criterion include Castalia's accountability to owners and customers parameter. Castalia's parameter further evaluates how a reform option or institutional structure can lead to better accountability to customers and communities for water price and quality preferences.

Strategic

We suggest splitting using our and assessing strategic issues under two parameters: accountability to owners and customers on the one hand, and flexibility to future changes on

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the other. Customer accountability is necessary to allow customers and stakeholders to act on concerns and for the service provider to remain accountable for the cost and quality of the service. Flexibility and adaptability to change according to new information and changing preferences are important for service providers to continue to provide services that meet minimum standards and community expectations.

Legislative

We suggest you retain this criterion. Compliance with Local Water Done Well legislation and regulatory changes are critical.

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Appendix 7

Water Infrastructure Reform planning.

Page 1 of 53



Assessment Potential of:

Potential benefits from a Masterton, Carterton, South Wairarapa, Tararua combined council area - Multi council Water services CCO.

Prepared for: Carterton District Council Masterton District Council South Wairarapa District Council Tararua District Council

Date: August 2024 Not authorised to be distributed outside of these councils.

Produced by: Matthew Townsend Trading as: Water Infrastructure Reform Planning

Page 2 of 53



Background

New policy places Councils at a junction point

Wholesale water reform, has not gone away. Water reforms are now under the direction of the new coalition Government comprised of National/Act/NZ First who have signaled a different approach for delivering acceptable water services to New Zealanders.

This new Government within its first 100 Days repealed the '3 waters / Affordable waters reform' program are now standing behind new policy called 'Local Waters Done Well'.

The major directive for 'Local Waters Done Well' is to confirm Local Government retaining control and accountability of water services and not being managed by centralised entities.

Councils are required to make their own decisions and then produce a 'Water Services Delivery Plan'. These will be due to be presented to the Minister of Local Government within 12 months after the "Council Controlled Organisation (CCO) enabling" Legislation is passed July 2024.

Production of a 'Water Services Delivery Plan' will be mandatory and will require:

- Councils to demonstrate they can both deliver water services in ways that are financially sustainable and that meet regulated quality standards
- To make transparent each council's plans for water services, which will make it easier for local communities to hold their councils to account for performance.

Councils will be free to produce standalone water services plans, but are being urged by the Minister of Local Government to work towards forming multi council water services CCO's in order to unlock efficiencies and to pool credit risk to maximise the borrowing leverage which could be made available.

The analysis contained is this report utilises as its base the financial/pricing model created and invested in by Department of Internal Affairs for conducting the then 3 waters/Affordable waters reform program.

The financial/pricing model was created by Department of internal affairs, checked and validated through an external accounting firm – Deloitte.

It was the financial/pricing model utilised for the production of Organisation A Water services delivery plan, and subsequently scrutinised by the Commerce Commission, the NZ Treasury, MBIE, Audit NZ, LGFA and WICS (Water Industry Commission Scotland).

Page 3 of 53



Table of contents

1. E	Exec Summary	5
2. I	nvestment required in the Network	13
2	2.1 Level of Investment	13
3. (Opex, and overhead back-office expenses	16
З	3.1 Cost of operations	16
3	3.2 Overhead back-office Expenses	16
4 . E	Balancing Funding and Financing	19
4	1.1 Funding and Financing	19
4	1.2 Paying back debt	19
5. F	inancial Sustainability	20
5. 1	5.1 Defined in the Bill	
6. L	Debt (Leverage and Financing)	22
C F	5.2 Balance Sheet Separation	22
e c	5.3 Leverage scope and notential	22
e	5.4 S&P Credit Rating	25
6	5.5 Accessing LGFA Standby facility	25
7 6		72
/. c	2.1. Sources of Efficiency	2/
7	7.1 Sources of Enricency	27 28
,		20
8. F	Prices consumers will pay for their water services (Funding)	30
8	3.1 Day one starting Prices	30
8	3.2 Suggestion for Sharing the benefits between the councils	31
5	3.3 Resulting price paths	31
9. F	Risk	36
10.	Financial Assumptions	37
11.	Financial Outputs	45
Ν	Masterton Single Council Water Services CCO/STABU	45
S	South Wairarapa District Council Single Council Water Services CCO/STABU	46
Т	Fararua Single Council Water Services CCO/STABU	47
C	Carterton Single Council Water Services CCO/STABU	48
Ν	Multi Council Water Services CCO	49
12.	Council AMPs - Project by Project	50

Page 4 of 53



1. Exec Summary

This report

The intention of this report is to provide the contributing Councils with an assessment of how their Local Waters Done Well services would need to be priced were they to be delivered on a Stand-Alone basis, **and then** compare the prices if they to be delivered from a combined Multi council water services CCO operating at its optimum.

This assessment is in the setting of the newly enacted legislation, which is 'a potentially unrecognisable' environment for Councils as there is now the addition of legislated economic and environmental regulators as well as a new suite of legislated financing tools at the water service organisations disposal.

This report provides a cost estimate of each councils' network investment which is needed in order to meet both the newly enacted legislated standards for water quality and the signalled anticipated standards due to be enacted for waste water and storm resilience.

Investment is highly correlated to pricing. Where the new reforms would require a catch up or increase in investment there will typically also be a required catch up or increase in the prices charged to households for these services.

However

Some of the enabling legislative changes for these reforms will:

- Facilitate the use of more appropriate financing tools to allow a closer alignment of debt and debt servicing to the infrastructure being invested in, and
- Enable councils to aggregate with neighbouring councils. This will provide the potential to unlock operational and capital investment efficiencies
- Align debt and debt servicing to the credit worthiness of the organisation, pooling of credit risk between councils to support a more confident credit risk profile and thereby unlocking even greater levels of finance availability.

These two drivers of enabling legislation can be utilised to **minimise bill shock** or **hold off the eventual upward adjustments in household prices** associated with the required network investment.

An assessment of the financing tools and mechanisms which become available to water infrastructure CCO's has been conducted for each four of the Wairarapa's and Tararua's 'stand alone business units (or single council CCO's) and **then** to a 'Wairarapa-Tararua multi-Council water services CCO' utilising S&P's corporate methodology for ratios and adjustments as at this stage it **provides the best proxy** of the "prudential credit considerations' criteria for LGFA borrowing allowance of **up to** 500 percent of revenue.

An estimation of the operational and back-office, capital investment, CCO set up cost, and efficiency savings which could be gained through aggregation has also been produced.

The assessments when applied in their financial settings produce the following outtakes:

In a Wairarapa-Tararua 4 Council Water Services CCO, all residents will receive compliant water services from efficiently operating water infrastructure, and pay 25% less **than they would if** the Councils formed Stand-alone business units. While non-residents (businesses) would pay 20% less.

Page 5 of 53



Other considerations

The considerations to own, manage and deliver local water services through a standalone business unit, a single council CCO or even an aggregated multi council water services CCO will be wide ranging for elected members to contend with on behalf of their constituents.

There is the need to balance up many other different factors and stakeholder perspectives which are outside of the scope of this report.

Finding the right structure to enable councils to be able to unlock any, some or the maximum potential of the financing tools made available from enabling legislation and LGFA will be critical for Council decision making as will deciding whether to form too small a single council CCO or too large an aggregated multi council CCO.

This report is therefore only intended to provide assistance in this decision-making by answering the question on behalf of households –

What is the value of the price premium households will need to pay for certain structural decisions?

Network

Robust and sustainable water infrastructure is essential for public health, economic prosperity and environmental sustainability. Some or most of the network infrastructure across the entirely of New Zealand are near capacity. This, in conjunction with historical under investment in water infrastructure, mean councils should need to increase investment to ensure quality, capacity and security of water services for now and into the future.

The Wairarapa Tararua regions are no different to the rest of New Zealand.

The proposals currently being consulted within LTP's across NZ, should, but may not always be up to a level which will satisfy the new water standards being set in Legislation.

A new feature resulting from the Governmental water reforms is an environmental regulator with further wide-ranging legislative powers and a range of consequences whom will be tasked with enforcing that owners of water infrastructure DO meet minimum standards.

An assessment of the investment which may be required for Local Waters Done Well compliance underpins this report and is supported by a recommended and costed project-by-project list, these are detailed in the Appendix.

The projects and investments have been selected to be completed or started within the first 10 years of the water services delivery plan and will satisfy the following attributes:

- Ensure at a minimum the legislated levels of service of water quality for New Zealanders are satisfied. (i.e. no enforcement fines will be issued).
- Address end of service life renewals, and an acceleration of renewals and replacements and monitoring technology where there is a demonstratable future operating cost foregone. (spend to replace before spend to repair, to make the network cheaper to operate).
- Adress capacity constraints. Spend on infrastructure growth such that the regions can continue to attract residents and businesses.

Page 6 of 53

	10 years of pro	jects (\$millions)		Actual Dollars
	Real 2024 Dollars	Nominal (delivered with Inflation)	House Holds	Nominal 10 yr capital Spend per household
Masterton	\$135.90	\$171.61	9,684	\$17,721
Tararua	\$148.99	\$187.50	6,552	\$28,615
Carterton	\$97.11	\$122.62	3,486	\$35,177
SWDC	\$177.94	\$224.69	4,007	\$56,073
Wairarapa-Tararua Region	\$559.94	\$706.41	23,729	\$29,770

The indicative totals of projects for the Council regions have been estimated to be:

Balance Sheet Separation - Potential

One of the tools the Government is currently legislating for will provide the ability to perform 'balance sheet separation'. This is the ability to decouple the water infrastructure assets, management and pricing, from the council environment such that it can operate at a higher geared leverage than councils are currently rated and legislated at.

Balance sheet separation (or access to more financing) will not be a binary tool which allows every water service CCO in NZ to operate up to the same level of leverage, again LGFA stipulates that prudential credit criteria will apply.

Leverage will be of a graduated nature which will be impacted by:

- The stand-alone nature of the ownership, delivery, management and pricing of the water services decoupled from influence from other Council activities and control.
- The status of Council actual and implied guarantee support of the organisation
- Dilution of Council ownership
- Increasing population bases to be supported by the infrastructure
- Extent of economic regulator's powers and the nature of its specific regulation
- and the success of water entities operating through regulatory cycles (3-5 yrs. each)
- Credit rating metric analysis

An assessment of the credit variables for Council scenarios for delivering water services through a Standalone business unit (STABU) / Single council CCO's or an aggregated multi Council CCO are detailed in the body of this report.

Utilisation of S&P's "Corporate methodology Criteria" for calculating Stand Alone Credit Ratings (SACR) would support a BBB+ credit rating, when the range of Free Funds from Operations (FFO) as a percentage of the overall operating level of debt is between:

- 17%-22% when councils operate as a Stand-alone business unit Single council CCO's
- Between 10% -12.5% with a mid-point of 11.25 % when operating as a multi council CCO
- An 11.25% FFO to debt in this financial setting equates to a borrowing of 431% revenue

BBB+ is the target anchor credit rating providing a sufficient shield above the threshold of investment grade and provides access to international capital markets and competitive interest rates.

The lower the FFO to debt percentage - the more leverage and borrowing being available.

Page 7 of 53



Aggregation efficiencies available to the multi–Council Water Services CCO

Efficiencies in both capital and operational spend should become available when a single focussed organisation is established for water services and the economic regulator applies its legislative authority to the efficient operations of water services delivery.

This is in comparison to current delivery, where it is operating in a wider council setting with financial constraints and in a self-regulated environment.

These efficiencies will be specific and have been estimated based on a range of observations from achievements in best international practice, as well as an econometric analysis of the current operating costs from within the New Zealand water infrastructure region.

Care has been taken to ensure that any regulatory reform efficiencies, which have been observed overseas, are not dominating nor being unrealistically applied to a New Zealand context where they do not fit, nor ignore New Zealanders specific and cultural appetite for the state of their environment.

<u>There should be no efficiency sought or intended for at least the first 3 years</u>. This is to recognise the transitional nature of establishing a Water Services Organisation.

The estimations indicate that, with

- the single focus of the water services delivery organisation
- the increase in capital investment conducted on the network and
- establishment of an economic regulator with specific regulation,

the combined Council CCO could unlock **2.17%** worth of operational cost savings cumulative per annum (when compared to sum of individual council costs), capping out after a 15-year period at **28%**.

Indications as to how this efficiency was calculated and could be generated are described in the body of this report.

Page 8 of 53
Balance sheet separation and efficiency translate to pricing

For the same levels of investment which will be required for Local Waters Done Well compliance, the residents of the participating Councils will face the following average price paths under the two bookend scenarios:



The result is a 25% reduction in Domestic Wairarapa Tararua regional average pricing.



And a reduction of 20.04% in non-domestic (Business) Wairarapa Tararua regional average pricing.

Page 9 of 53



Sharing the benefits

Should councils agree to proceed utilising an aggregated multi council CCO then this report recognises that councils will join or vest assets and debt and household obligations into the organisation from unequal financial states. The financial states refer to existing water debt which still needs to be repaid, and the future investment requirements which still need to be addressed.

A <u>suggested</u> approach for addressing any potential constituents concerns of the unevenness of council's financial states from aggregation has been provided.

There are many ways in which the participating councils may engage in distributing the aggregation benefits across the wide pool of constituent's water services pricing. This suggested approach is just a suggestion and calculates adjustments (premiums and discounts) to each council regions starting average households' prices. This suggestion attempts to recognise the debt and capital investment needed between the different council groups – and is explained in the body of this report.

The resulting suggested pricing is displayed as follows:

Domestic Connections

Domestic Water Services Prices									
	St	arting Prices		Price	e after 10 year	s			
	Single council	Multi Council	Variance	Single council	Multi Council	Variance	Tot	al 10 yr variance	
Carterton Council	\$3,611	\$2,519	(\$1,092)	\$7,084	\$5,550	(\$1,535)	\$51,839	\$38,571	-25.6%
Masterton Council	\$1,772	\$1,102	(\$669)	\$3,060	\$2,429	(\$632)	\$22,853	\$16,880	-26.1%
South Wairarapa Dictrict Council	\$3,714	\$2,544	(\$1,171)	\$7,129	\$5,604	(\$1,524)	\$52,189	\$38,949	-25.4%
Tararua	\$2,880	\$1,652	(\$1,228)	\$4,224	\$3,640	(\$584)	\$34,022	\$25,301	-25.6%
							\$160,903	\$119 699	-25.6%

The graphical representation of this pricing output is detailed in the following graph.



Page 10 of 53



Non-Domestic Connections

			N	on - Domes	tic Water	Services	Prices		
	St	Starting Prices			Price after 10 years				
	Single council	Multi Council	Variance	Single council	Multi Council	Variance	Tota	al 10 yr variance	
Carterton Council	\$4,866	\$3,634	(\$1,232)	\$9.546	\$8.006	(\$1,540)	\$69.852	\$55.644	-20.3%
Masterton Council	\$3,982	\$2,657	(\$1,324)	\$6,878	\$5,855	(\$1,023)	\$51,363	\$40,693	-20.8%
South Wairarapa Dictrict Council	\$6,966	\$5,104	(\$1,863)	\$13,370	\$11,245	(\$2,125)	\$97,881	\$78,149	-21.0%
Tararua	\$3,559	\$2,186	(\$1,373)	\$5,220	\$4,817	(\$403)	\$42,041	\$33,478	-20.4%
							\$261,137	\$207,964	-20.4%

The graphical representation of this pricing output is detailed in the following graph.



Next Steps

This report provides a financing and funding assessment for the four councils in the Wairarapa-Tararua region to consider. It demonstrates the impact on their constituents pricing obligations between the options of remaining on a silo'ed solo path or aggregating the four councils water infrastructure assets into a single multi council CCO.

Should the Councils agree to proceed in an aggregated multi council water services CCO then as part of producing a Water Services Delivery Plan, the participating Councils will need to at least conduct the following:

- a negotiation of the debt to be vested in, agreeing principles and calculations
- a Prioritisation of the capital investment envelope to form a region wide agreed Asset Management Plan
- an agreement of aspects of the operations in the business plan:
- a process of due diligence which will enable these numbers to be converted into bottom-up budgets

These will be amongst a range of other workstreams to progress through, comprising but not limited to:

- Legal Shareholder and subscription agreements and CCO constitutions
- HR transition and hiring

Page 11 of 53

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- IN CONFIDENCE - AUDIENCE SPECIFIED

- IT capability or contracting some or all the overhead functions to a Wellington or Dunedin CCO shared services supplier who will be building an expensive telco grade billing and asset management capability
- Governance arrangements
- Treasury functions if borrowing overseas instead of LGFA

Then the suggested starting price realignment can be negotiated, but in a wider body of work which looks at the impact of each individual household price.

Page 12 of 53



2. Investment required in the Network

This section addresses the question: what needs to be funded?

2.1 Level of Investment

A review of the levels of investment indicated in the participating Council regions has taken into account the new standards for water infrastructure which would be required (Local Waters Done Well compliance). The water standards are governed by the Water Services Act 2021 which was legislated to establish Taumata Awowai, then subsequent secondary legislation was introduced for water services within the "Drinking Water Standards for NZ" regulations 2022.

Taumata Arowai have released an 87 Page document specifying the application of these standards (available since July 2022), Standards for Waste water and Storm Water are soon to be formalised.

The following table totals the first 10 years (of 30) investment per region estimated (but yet to be workshopped) to achieve Local Waters Done Well compliance.

	10 years of pro	jects (\$millions)		Actual Dollars
	Real 2024 Dollars	Nominal (delivered with Inflation)	House Holds	Nominal 10 yr capital Spend per household
Masterton	\$135.90	\$171.61	9,684	\$17,721
Tararua	\$148.99	\$187.50	6,552	\$28,615
Carterton	\$97.11	\$122.62	3,486	\$35,177
SWDC	\$177.94	\$224.69	4,007	\$56,073
Wairarapa-Tararua Region	\$559.94	\$706.41	23,729	\$29,770

Note that the sum of the Investment requirements amounts to **\$706m** (Nominal = with inflation) over the first 10 years of 30 Years.

In a Water organisation operating with obligations to both Environmental and Economic regulators (supported by Price Quality Legislation) it is estimated that the same levels of projects would be delivered for **\$642m**.



Page 13 of 53

Note the capital investment envelope has been initially set to gradually increase over time. This is designed to provide strong long-term demand signals for the market who can plan ahead and tool up their operations to deliver long term supply. The composition and activity and timing of the total estimated capital spend budget <u>for the multi council CCO</u> is displayed in the following table.

AMP allocation (non	ninal dollars)	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	Total 10 Yrs
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Wastewater	Growth	\$0.52	\$0.59	\$0.66	\$0.72	\$0.76	\$0.80	\$0.84	\$0.86	\$0.87	\$0.87	\$7.48
Wastewater	Level of service	\$6.98	\$7.97	\$8.99	\$9.67	\$10.29	\$10.85	\$11.35	\$11.56	\$11.72	\$11.82	\$101.21
Wastewater	Renewal	\$8.11	\$9.27	\$10.46	\$11.68	\$12.92	\$14.21	\$15.52	\$16.55	\$17.61	\$18.71	\$135.03
Total Waste Water		\$15.61	\$17.82	\$20.11	\$22.07	\$23.97	\$25.86	\$27.71	\$28.97	\$30.20	\$31.40	\$243.73
Stormwater	Growth	\$0.05	\$0.06	\$0.06	\$0.07	\$0.07	\$0.08	\$0.08	\$0.08	\$0.08	\$0.08	\$0.73
Stormwater	Level of service	\$1.09	\$1.24	\$1.40	\$1.51	\$1.61	\$1.69	\$1.77	\$1.81	\$1.83	\$1.85	\$15.80
Stormwater	Renewal	\$1.01	\$1.15	\$1.30	\$1.45	\$1.61	\$1.77	\$1.93	\$2.06	\$2.19	\$2.33	\$16.81
Total Storm Water		\$2.15	\$2.45	\$2.77	\$3.03	\$3.29	\$3.54	\$3.78	\$3.95	\$4.11	\$4.26	\$33.34
Water	Growth	\$5.10	\$5.82	\$6.57	\$7.07	\$7.52	\$7.94	\$8.30	\$8.45	\$8.57	\$8.64	\$73.99
Water	Level of service	\$6.00	\$6.86	\$7.74	\$8.32	\$8.85	\$9.34	\$9.77	\$9.95	\$10.09	\$10.17	\$87.08
Water	Renewal	\$12.28	\$14.03	\$15.83	\$17.68	\$19.56	\$21.50	\$23.49	\$25.05	\$26.66	\$28.31	\$204.39
Total Drinking Water		\$23.38	\$26.71	\$30.13	\$33.07	\$35.94	\$38.78	\$41.55	\$43.45	\$45.31	\$47.13	\$365.46
Total Growth		\$5.67	\$6.47	\$7.30	\$7.86	\$8.36	\$8.82	\$9.22	\$9.39	\$9.52	\$9.60	\$82.20
Total Level of Service	9	\$14.07	\$16.07	\$18.13	\$19.51	\$20.75	\$21.89	\$22.89	\$23.32	\$23.64	\$23.84	\$204.09
Total Renewals		\$21.41	\$24.45	\$27.58	\$30.81	\$34.09	\$37.48	\$40.93	\$43.66	\$46.47	\$49.35	\$356.23
Total		\$41.14	\$46.99	\$53.02	\$58.17	\$63.20	\$68.18	\$73.04	\$76.37	\$79.62	\$82.79	\$642.52

The investment requirements have been prioritised on their merits and result in a ratio of:

- 31% of the proposed envelope focussed on achieving the required levels of service legislated for, this overlaps with renewals:
- 56% of the capital investment envelope will be focussing on catching up and maintaining a renewal programme of the network which will ensure that the network is up to date and able to operate as it is designed to and eliminating any costly future network failures, note this investment amounts to 217% of the network depreciation.
- 13% of the capital envelope (AMP) is categorised as spend to enable new network capacity as well as capacity upgrades to existing infrastructure to allow increases to populations.



An under invested network, can still operate, but faces a much higher risk of costly wastage and inconveniently timed expensive fault fixing. The Capital investment envelope this analysis supports incorporates a targeted renewal programme which over time will make the network more resilient and cheaper to operate.

Page 14 of 53



Next Steps

There is a risk that the New Zealand Marketplace may not be able to supply the intended capital investment programmes, particularly as there will be demand across the entire countries water infrastructure in the same 10-year time frame.

Should the Councils decide and agree to form a multi council water services CCO then as part of producing a Water Services Delivery Plan, will need to:

Firstly, workshop the LTP and the list and costing of projects in this investment programme with a view to reassessing the value of investment needed to achieve compliance with the Local Waters Done Well reforms.

Then create a unified asset management plan (AMP) which will a) incorporate all the project outcomes, b) stage out projects and investment based on an agreed needs/prioritisation assessment, and c) seek out leverage opportunities, d) identify staged projects dependencies e) engage suppliers to assess delivery and secure future supply discounts.

Page 15 of 53

3. Opex, and overhead back-office expenses

This section addresses the question: what expenses are now needed to deliver water services?

3.1 Cost of operations

Network expenses

The operational expense estimates to manage and operate water service infrastructure utilise a high trust model as they were sourced direct from council provided funding impact statements (FIS).



As investment is performed on a network there will be less faults to fix, less breakage, and less wastage. The faults which still occur become easier to locate and fix, bespoke technology becomes standardised which become cheaper to buy, warehouse and replace.

The above graph demonstrates how efficient the operating cost of multi council CCO network becomes as this investment programme progresses and realises 2.17% efficiency compounding per year after yr. 3. (NB excludes inflation).

3.2 Overhead back-office Expenses

Inflation, CCO specific and Local Water Done Well Specific Expenses

In order to provide a 10-year operational expense forecast the following financial dynamics have been added to the Councils STABU/ single council CCO scenarios and the multi-council CCO.

- Ongoing budgeted inflation,
- Proportional budget increases for operational expenses due from population increases

Page 16 of 53



- Increases in Opex due from the increased investment in more assets
- A budget for the proportion of Regulatory levies payable (levy applied to industry to support the regulators)
- A budget for Community and stakeholder consultation activities
- A budget for vulnerable customer assistance
- Directors' fees and Chief Executives salary For a CCO scenario
- Additional budget Head count to satisfy additional regulatory and business operations requirements



The second 'stacked line' chart above then displays the other operational expenditure effects and items making up the total operational expense's envelope for the potential multi council CCO.

Additional expenses (and inflation) have then been added to the (first graph) uninflated network cost thereby increasing the overall total budget with the expenses where efficiencies are not applicable. The jump in year three of the other expenses represents the second regulatory cycle with a ramp up in deliverables and expenses.

General contribution to overhead

Within the operational expenses provided from the FIS statements there is an additional element of contribution to overhead loading. This is to account for all the IT, payroll, HR, property and finance functions. This been retained in the operational forecast to, in part, reflect the overhead nature of operating a standalone organisation.

Scenario specified overhead

Page 17 of 53

The following table provides an indication of the nature of the additional overhead which will be required to fund and to run and operate each of the organisation's scenario configurations.

	Stand Alone	Single Council	Multi Councl CCO
	business onit		
Chief Executive	No	Yes	Yes
Board of Directors	No	Yes	Yes
CFO	No	Yes	Yes
Treasury Function	No	No	Perhaps
Annual Credit rating	No	No	Perhaps
Annual Reports	Yes	Yes	Yes
Additional Financial and Regulatory Reporting Staff	Yes	Yes	Yes
Separate building	No	Yes/no	Yes
Staff Transitioned	No	Yes	Yes

The cost estimates between the different scenarios are detailed in the assumptions Section of the Appendix.

The following table provides a summary of the estimated overhead costs for each of the scenarios.

(Millions)	SWDC	Masterton	Carterton	Tararua	Multi Council CCO
Current Council Allocation	\$0.84 m	\$2.72 m	\$2.41 m	\$1.41 m	\$7.38 m
Added to recognise a SABU	\$0.84 m	\$0.84 m	\$0.84 m	\$0.84 m	\$2.24 m
Total	\$1.68 m	\$3.56 m	\$3.25 m	\$2.25 m	\$9.62 m
Perspective Check					
# staff at Circa \$100k	8.4	17.8	16.3	11.2	48.1
Plus: Annual Non staff o'head Opex spend Reflects IT capability, Building, Security, audit	\$0.84 m	\$1.78 m	\$1.63 m	\$1.12 m	\$4.81 m

A perspective check on the overhead expenses to run the organisation has been provided. This is performed by identifying how many staff are funded at circa \$100k p.a. each with a 100% loading to reflect all the IT, systems and building.

The perspective check suggests that in a Multi Council CCO there will be an additional 48 staff classed as Overhead staff only (not maintenance and operating staff) and a \$4.8m Opex p.a. budget for IT systems and building. expenses. (note need to workshop through the stranded or straddled overheads between water and other council activities).

Next Steps

The operational expenses estimated in this section are a top-down estimation.

A full bottom-up scoping Business plan including an organisation chart (board approved GM structure) and IT capability will need to be produced, assessing whether this top-down operating expenses envelope is fit for purpose.

Page 18 of 53



4. Balancing Funding and Financing

This section addresses the question: what is the right level of financing and funding?

4.1 Funding and Financing

There is a wide range of possible funding and financing tools available to meet the costs of delivering water services, with the appropriate source and its use being determined by the nature of the costs and the outcomes being sought.

Ultimately, all costs need to be funded in some way, but where appropriate the funding may be deferred or spread through financing. A good example of this is borrowing, where it is deemed appropriate to spread the funding over a period to match where benefits are accessed over time.

The following diagram shows the general interplay between the components of funding, financing, and costs to deliver services in a very simplistic way. It indicates the careful balancing needed when determining capital expenditure (to create assets), operational costs to run the organisation, revenues (through charges and fees) and debt (to finance long term assets), and how no one component exists in isolation.



The debt created by borrowing from others creates a long-term obligation. As a financing tool, it spreads the funding requirement from the current year to a number of future years, usually to better match the service being provided by a long-term asset.

A key consideration is not just current borrowing levels, but also future expectations based off capital expenditure programmes, revenue levels and overall market movements, including leaving room for additional borrowing for unexpected events.

4.2 Paying back debt

These CCO's are not expected nor legislated to derive a profit or pay a dividend but any which do would be subject to Commerce Commission guidance and input methodology. Any free cash which is made available from efficiencies will be used to **both** reduce debt **and** reduce prices of the services in a ratio which allows the organisation to retain its target credit rating and or banking covenants.

Page 19 of 53

5. Financial Sustainability

This section addresses the question: what does financial sustainability mean?

5.1 Defined in the Bill

The model utilised for this analysis creates a plan that satisfies the criteria of being financially sustainable as best required under the bill, there are no explicit metrics provided in legislation to allow for the widest range of business proposals to be adopted and latitude has been preserved for future Commerce Commission revenue setting and intervention capability.

This analysis determines the level of revenue - which is needed in order to be operating at target levels of leverage metrics. These metrics are assessed at a level which can sustain a credit rating that which a credit rating agency would support uninhibited investment grade access to debt markets and efficient interest rates.

The following excerpts of the bill are provided which have been used to support this rationale.

PART 1 (of the bill) - PRELIMINARY PROVISIONS - 5 Interpretation

financially sustainable means, in relation to a territorial authority's delivery of water services, that --

- a) the revenue applied to the authority's delivery of those water services is sufficient to ensure the authority's long-term investment in delivering water services; an
- b) the authority is financially able to meet all regulatory standards and requirements for the authority's delivery of those water services

The two main recurring, intersecting and overlapping themes in the legislation are the compliant network and financial sustainability (with affordability not mentioned), Councils will need to access the risk of submitting a non-network compliant Water Service Delivery Plan and it being deemed not financially sustainable.

PART 2 (of the bill) - SUBPART 1 -Water services delivery plans

8 Territorial authorities must prepare water services delivery plan

- (1) Each territorial authority must prepare a water services delivery plan that
 - a) identifies the current state of the authority's water services; and
 - b) demonstrates publicly its commitment to deliver water services in a way that -
 - i. ensures that the territorial authority will meet all relevant regulatory quality standards for its stormwater network, wastewater network, and water supply network; and
 - ii. is financially sustainable for the territorial authority; and
 - iii. ensures that the territorial authority will meet all drinking water quality standards; and
 - iv. supports the territorial authority's housing growth and urban development, as specified in the territorial authority's long-term plan.

Further clarity for the financial sustainability definition criteria is provided by the legislation in the bill pertaining to Watercare's charter and business plan.

PART 4- WATERCARE SERVICES LIMITED - 62 Role of Crown monitor

(1) The role of the Crown monitor is to—

Page 20 of 53



- a) prepare a charter for Watercare (see section 63); and
- b) review, and provide comments on, Watercare's business plan (see section 67); and
- c) monitor, and report on, Watercare's performance against the charter (see sections 71 and 72); and
- d) take action to address any failure by Watercare to comply with the charter (see sections 76 to 81).

64 Content of Part 1 of Watercare charter

Minimum service quality standards

(1) Minimum service quality standards contained in Part 1 of a Watercare charter may relate to 1 or more of the following:

- a) services provided by Watercare to consumers:
- b) the performance of Watercare's water supply network:
- c) the performance of Watercare's wastewater network
- d) the delivery of Watercare's capital investment.

Financial performance objectives

- (2) Financial performance objectives contained in Part 1 of a Watercare charter may include 1 or more of the following:
 - a) the maximum amount of revenue that Watercare may earn on water supply services and wastewater services:
 - b) the approach that Watercare must use to recover the cost of its infrastructure through infrastructure growth charges:
 - c) efficiency targets that Watercare must achieve:
 - d) the minimum credit rating that Watercare must maintain.

69 Effect of charter

After the Crown monitor makes Part 2 of the Watercare charter, the charter is binding on Watercare during the time period to which it applies.

The commercial modelling detailed this report has been performed conservatively and addresses ALL the financial performance objectives in the Watercare charter.

The report notes the recent guidance provided by the Minister and LGFA, and note that LGFA would facilitate borrowing up to 500% of revenue BUT subject to prudent credit criteria. In the absence of detailed guidance from LGFA this report relies on the S&P approach as being the best proxy for LGFA's prudential credit criteria and assumes that the constitution and accountability framework guidelines have been adhered to.

Page 21 of 53

6. Debt (Leverage and Financing)

This section addresses the question: how much debt is available?

6.1 Vested Debt in to the CCO

Utilising the Councils publicly available FIS Statements, an estimation of the existing waters Debt which is likely to be vested into or ringfenced (along with the assets) and need to be covered by future water pricing is:

	House Holds	Estimated Water Debt	Estimated Debt per
		Vested III	nousenoia șActuai
Masterton	9,684	\$54.30 m	\$5,607
Carterton	3,486	\$22.66 m	\$6,501
Tararua	6,552	\$55.24 m	\$8,431
SWDC	4,007	\$36.07 m	\$9,001
Wairarapa-Tararua Region	23,729	\$168.27 m	\$7,091

6.2 Balance Sheet Separation

The cost of the borrowings imposed by lenders will ultimately be determined by the price that those lenders place on the borrowings, driven by perceived risk within the current financial environment. A key guide to the risk of an organisation is the credit rating that it is given by credit rating agencies.

The primary metric used by the capital markets and credit rating agents to assess the capital structure of an organisation like a Water Services CCO is the ratio of funds from operations (FFO) to debt. This ratio gives an indication of the percentage of debt that could theoretically be repaid in a year.

FFO is similar to and is near enough to being the cash equivalent of EBITDA, with the exception that it relies on cashflows only as its basis thereby eliminating non-cash accounting adjustments of accrual, valuation, provision and deprecation and other non-cash adjustments subject to accounting practitioners' skill and judgement.

Analysis of international regulated water organisations shows credit rating agencies view stand-alone Water Service Providers which have established regulatory environments and track record of operating through at least 3 regulatory cycles and above 500k households, to hold an investment grade of BBB for their Stand Alone Credit Profile (SACP) this means they can operate with FFO to debt ratios of between 3% to 8%, and have unencumbered access to the international debt markets to trade with efficient and competitive interest rates.

For comparative purposes a sample of best practise international FFO to Debt ratios are displayed in the following table;

Page 22 of 53





Funds from operations (FFO) to debt

The extent of how much leverage will be afforded to a water services CCO by a rating agency's criteria is dependent on a number of factors, and in particular **how closely it can align to being like** the successful overseas standalone regulated water infrastructure companies.

6.3 Leverage scope and potential

The main factors contributing to higher available leverage are in the qualitative assessment of the standalone nature of the Organisation from council:

- the extent to which the water Organisation is less controlled by a Council and governed by its own board being free to make debt decisions.
- The extent to which the Water Organisation can make its own revenue decisions under the control of a water regulator.
- The status of guarantee of the Water Organisation from councils
- Greater population base to which to extract economic efficiencies from.
- Greater dilution of ownership

This effect is demonstrated in the following illustration.



When assessing whether to finance from LGFA or from open markets, it is important to note the following lines of legislation which were added to the Bill Two enabling legislation. This

Page 23 of 53



provided Watercare with sufficient financial decoupling from Auckland Council so that Watercare could operate in a similar standalone environment to overseas water companies and be able to trade to its maximum leverage potential.



A colour coded traffic light has been added to illustrate how, (when the underlying principles behind these lines of legislation are stood up against the potential range of Water services delivery business models), the councils' standalone scenarios are likely to be viewed by the rating agencies.

6.4 S&P Credit Rating

When utilising the S&P corporate methodology (S&P Corporate Methodology: Ratios and Adjustments Criteria: Published April 2019) and in light of the rationale behind the above principles in the bill 2 legislation, the following indicative assessments have been made:

Page 24 of 53



A Water services Delivery organisation which takes the form of a stand-alone business unit ringfenced within each respective council would operate at 20% FFO to Debt, this translates to similar leverage currently afforded to each Council and translates to a Revenue to debt ratio of circa 275%.

A Water services Delivery organisation which takes the form of a Multi council CCO - operates with prudential credit criteria, (and adheres to the constitution and accountability framework provided by LGFA) would operate at between 10% - 12.5% having a mid-point average of 11.25% FFO to Debt, this translates to a Revenue to debt ratio of 430%.

Category	Assessment			
Core - Cash Flow Leverage ratios	Aggressive "+"			
Supplimentary - Interest ratios	Modest "-"			
Supplimentary - Payback Ratios	Intermediate "+"			
Financial risk Score	Aggressive "+"			
Business risk Score (Needs to be:)	Strong to Excellent			
	NB: To be above Satisfactory			

This Financial risk score requires an estimate of FFO to Debt to be at or above **10% to 12.5%** with a midpoint set at **11.25%**.

These ratios yield a financial risk score of "Aggressive +" which is sufficient for the corresponding business risk score to reside within the range of "Strong" to "Excellent", providing a shield to account for any additional modifiers and thereby allowing it to trade with a target Stand Alone Credit Profile (SACP) of circa BBB+, which will result in an Issuer Credit rating of A-.

Business risk considers a range of factors spanning an assessment of Country risk, industry risk, and competitive position. Note after 36 years of trading Watercare's business risk was last assessed as 'excellent' in 2018.

Modifiers consider a range of other factors - assessment of portfolio diversification, capital structuring liquidity and hedge, Management team /Governance appointments and arrangements and ownership composition.

A FFO to debt ratio suggests that **11.25%** of debt could be repaid in any one year, or alternatively in simple terms the current debt balance could be fully repaid in around 9 years.

In order to apply a level of confidence to these estimations a secondary (triangulation) piece of analysis has been conducted to align the financial metrics and proposed business structures to a sample of existing businesses already rated with a BBB+.

A third piece of analysis (triangulation) to provide confidence in these estimations has been to align differently calculated financial metrics against LGFA revenue settings.

6.5 Accessing LGFA Standby facility

LGFA have provided a constitutions and accountability framework guidance for the preferred structuring of the Multi-council CCO, adhering to this would optimise access to their range of support funding.

Page 25 of 53

LGFA have also reported to the NZX that the Crown is a 20% shareholder in LGFA and currently extends a NZ\$ 1.5 billion liquidity facility to LGFA.

The liquidity facility when utilised will provide the LGFA the latitude to support a multi council CCO to trade up to its target credit rating and prudential credit metric settings over a specified period of time.

Utilising the liquidity facility in order to trade up to the entities target credit rating prudential credit metric settings, means that revenue sufficiency will not need to be stringent on day one, and therefore household prices will not need a large day one increase, but rather an equivalent annual increase.



Note this analysis assumes that the future structuring of the CCO will conform to the LGFA guidance to optimise their support and therefore demonstrates what financing is possible and the downward impact on household pricing.

Next Steps

A full credit assessment will need to be conducted in light of the final composition of the CCO - its operating links to their respective Councils – its conformity to constitution and governance framework guidelines, and/or alternatively ongoing discussions with LGFA as business planning advances.

Page 26 of 53

7. Economic Efficiency

This section addresses the question: how much economic efficiency can be obtained and released to those who are paying to use the network?

7.1 Sources of Efficiency

Efficiencies in both capital and operational spend will be made available and will be specific to the combination of the participating Councils and have been calculated based on observations from achievements in best international practice, as well as an econometric analysis of the current operating costs from within the New Zealand water infrastructure region.

Care has been taken to ensure that regulatory reform efficiencies, which have been observed overseas, are not dominating nor being unrealistically applied to a New Zealand context where they do not fit, nor ignore New Zealanders specific and cultural appetite for the state of their environment.

To this end the econometric efficiency model determines a distributed statistical weighting of efficiency across - the back-office functions and - the operating functions and also across - the Capital investment envelope.

The total levels of efficiency and the distributed weightings of this efficiency are based on changes observed from a) changes in other NZ industries when they were regulated b) the immediate potential of operational cost efficiency observed in other operating council settings today, (recognising the mix of councils with rural to urban ratios) and c) the KPI based cost structures of international regulated water companies, reflecting an adjustment for NZ council groupings being at lower scales.

The estimations indicate that this Regional Multi Council CCO could unlock **2.17%** worth of operational cost savings cumulative per annum, capping out after a 15-year period at **28%**.

There should be no efficiency sought or intended for at least the first 3 years. This is to recognise and reflect the transitional nature of establishing a Multi Council Water Services CCO.

The following describes the nature of the additional efficiencies which could be obtained through a multi–Council CCO.

Capital Investment efficiency

Longer term Capital investment planning and procurement planning.

Ability to make bigger more regional leveraged decision making.

Filling in down time with the smaller projects

Operational Opex efficiency

Centralised depots and reuse of overhead equipment

Increase in monitoring assessment technology providing predictive planning

Better use of downtime with funds available for proactive maintenance

Corporate Opex Savings

Shared use of IT, payroll, accounting, billing platforms

Page 27 of 53



Economic Regulator

Information disclosure requirements will ensure that the delivery of capital projects are being scrutinised and the CCO will be held to account for delivery and closing out stated projects, thereby ensuring less slippage of capital projects and investment.

Proactive maintenance

Utilise additional cash availability from balance sheet expansion for accelerated proactive maintenance to forego the cost and number of future fixes.

Automated monitoring and detection systems, less eyes needed over more network

Use of AI based proactive fault diagnostics

Standardisation of field and plant equipment

7.2 Carterton/Masterton/South Wairarapa/Tararua councils

The following Graph displays the cost of operations per household per annum per council (excluding overheads), and then ordered (scattered) across the number of households per council.



3 Water Operational Cost per Capita per population region

There is a noted slight trend for the cost of water network operations for NZ councils to trend lower when there is a larger number of households in those councils.

This data does not adjust for the current state of the networks - which is where any historic under investment in networks would see higher operating costs, and any historically high invested in networks being cheaper to operate.

The red data point represents the participating Councils who will embark on an increase in investment of their network.

Incorporating the costs per capita per NZ Council population region into the econometric modelling along with:

- A reflection of Council proximity Overheads and operations
- Similar composition of urban/rural household mix
- An existing network provider with a lower operating cost to lead the way

Page 28 of 53

• Increased capital investment programme with renewals and proactive maintenance

The estimations indicate that this multi–Council CCO could unlock **2.17%** worth of operational cost savings cumulative per annum, capping out after a 15-year period at **28%**.

Important to Note there is no operational saving factored in for the first 3 years allowing time for staff to become engaged, staff hirings, its data sources to become cleansed and suppliers to re adjust to working with the new organisation.

Next Steps

This efficiency is limited to being a statistical estimation of the potential cost efficiency which could be achieved and distributed back to households through lower prices.

It will be at the discretion of the councils / CCO's to set and own their cost efficiency targets - noting a direct correlation between lower targeted efficiencies equalling higher household prices.

It is anticipated that the first regulatory cycle (3 to 5 years) will see the economic regulator enforcing information disclosure requirements on the CCO, this typically involves the regulator obtaining/sectioning information to hold the CCO to account for project and cost delivery and any other specific legislative requirements

In the background the economic regulator will utilise the information obtained through information disclosure to build up and test their economic model, typically called a 'Regulatory Asset Base Model' (RAB), which will be used to produce estimates of the CCO's efficiency potential and cost, this will be in lock step with a nationwide water services cost model and supported by international experience of regulating water entities.

The second regulatory cycle will typically see the regulator setting the CCO's revenues and the pricing which the CCO can charge its households 'Maximum Allowable Revenue' (MAR) which is calculated off the RAB and utilises an input methodology agreed by the Commerce Commission and all the other regulated networks in NZ.

The pricing will be based on the (to be) Legislated Water Services Price Quality Regulation which are typically drafted to set pricing on behalf of consumers based on an efficient network, this will take the economic regulators view of the efficiency potential into account.

Again - it will be at the discretion of the councils / CCO to set and own their starting cost efficiency targets - noting a direct correlation between these efficiency targets and household prices.

This report attempts to pre-empt the work that the Commerce Commission as the economic regulator will undertake, in order to demonstrate the revenues and prices which will be set for end users and what these set revenues will mean for the financial running of the CCO.

Page 29 of 53

8. Prices consumers will pay for their water services (Funding)

This section addresses the question: what prices will consumers pay for these water services?

8.1 Day one starting Prices

Investment is highly correlated to pricing. Where the new reforms will require a catch up or increase in investment there will typically also be a required catch up or increase in the prices charged to households for these services.



This report utilises average prices as such they are averages – an average is a number which represents a range of individual different house hold prices, in instances this span can be quite wide.

The year one pricing has been calculated within the CCO's financial settings so will provide a good estimation of the average price households will need to pay on day one and towards year 10.

An estimation of "one bill to two bill" price parity has not been conducted and is outside the scope of this report. Councils may not be in a position to perform an exact carve out of water services delivery prices from current total council bill, as there may be stranded assets and operations to remain in council and be recompensed for.



8.2 Suggestion for Sharing the benefits between the councils

Recognising that there is an unevenness of the three councils starting positions entering into a Multi Council Water Infrastructure CCO, further calculations have been performed on the starting prices to provide a suggestion as to how to recompensate each councils' constituents for the relative financial strengths and weaknesses of its participating councils.

Domestic



Based on the difference in each council's debt being vested into the Multi Council Water Services CCO, a calculated change has been added to the starting prices.

This reflects the increase in starting prices attributable from debt and is prorated across each councils starting average prices.

The Pro-rated % is derived from the % of each councils Debt per house hold "above or below" the weighted average of the 'total combined debt' per 'total number of combined households.

Based on the difference in each council's capital investment being needed in the regions Council Water Services CCO, a calculated change has been added to the starting prices.

This reflects the increase in starting prices resulting from increases in Capital Investment and is prorated across each councils starting prices.

The Pro-rated % is derived from the % of each council's capital requirements per house hold "above or below" the weighted average of the 'total combined capital requirement' per 'total number of combined households.

8.3 Resulting price paths

The change in prices as a result of the suggested calculations are displayed in the following graph:



The resulting comparator price paths are displayed below.

				Domestic	Water Ser	vices Pri	ces		
	St	arting Prices		Price	e after 10 year	s			
	Single council	Multi Council	Variance	Single council	Multi Council	Variance	Tota	al 10 yr variance	
Cartestan Council	62 611	62 524	(\$1.097)	67.084	¢5.667	(61.419)	ĆE 1 820	\$20.072	24.6%
Masterton Council	\$1,772	\$2,524 \$1,105	(\$667)	\$7,084 \$3,060	\$3,667 \$2,480	(\$580)	\$22,853	\$17,099	-24.8%
South Wairarapa Dictrict Council	\$3,714	\$2,549	(\$1,165)	\$7,129	\$5,722	(\$1,406)	\$52,189	\$39,454	-24.4%
Tararua	\$2,880	\$1,656	(\$1,225)	\$4,224	\$3,717	(\$507)	\$34,022	\$25,629	-24.7%
							\$160,903	\$121,254	-24.6%

The graphical representation of this pricing output is detailed in the following graph.







Non-Domestic or Business

The resulting comparator price paths are displayed below.

Non - Domestic Water Services Prices									
	St	arting Prices		Price	Price after 10 years				
	Single council	Multi Council	Variance	Single council	Multi Council	Variance	Tota	al 10 yr variance	
			(*** *** *)			(4			
Carterton Council	\$4,866	\$3,642	(\$1,224)	\$9,546	\$8,175	(\$1,3/1)	\$69,852	\$56,367	-19.3%
Masterton Council	\$3,982	\$2,663	(\$1,319)	\$6,878	\$5,979	(\$899)	\$51,363	\$41,221	-19.7%
South Wairarapa Dictrict Council	\$6,966	\$5,115	(\$1,852)	\$13,370	\$11,482	(\$1,888)	\$97,881	\$79,164	-21.0%
Tararua	\$3,559	\$2,191	(\$1,368)	\$5,220	\$4,919	(\$301)	\$42,041	\$33,912	-19.3%
							\$261,137	\$210,665	-19.3%

The graphical representation of this pricing output is detailed in the following graph.



Non-Domestic/Commercial Pricing = Wairarapa-Tararua Multi Council CCO Vs single Council

Next Steps

Should the Councils agree to proceed in an aggregated multi council water services CCO then as part of producing a Water Services Delivery Plan, the participating Councils will need to conduct the following:

- A negotiation of the Debt to be vested in agreeing principles and calculations
- A Prioritisation of the capital investment envelope to form an agreed upon Asset Management Plan
- An agreement of aspects of the operations of the business plan:
- as well as a process of due diligence will enable these numbers to be converted into bottom-up budgets.

These will be amongst a range of other workstreams to progress through

- Legal Shareholder and subscription agreements and CCO constitutions
- HR transition and hiring
- IT capability or contracting some or all the overhead functions to a Wellington CCO shared services supplier who will be building an expensive telco grade billing and asset management capability
- Governance arrangements
- Treasury functions

Then the suggested starting price realignment can be negotiated, but in a wider body of work which looks at the impact of each individual household price.

This is a good opportunity to also look at realigning all the tariffs to search for the ability to make a series of minor changes and reduce the overall number of unique tariffs, thereby yielding lower processing requirements and a cheaper cost of back-office operations.

A snap shot of some of the current tariffs is displayed below.

WATER SERVICES PRICING TARIFFS FOR WAIRARAPA & TARARUA DISTRICTS (Prices and Revenues GST Exclusive, Examples are 2022/23 Annual Plans)

-				Existing	Pricing	Proposed	Pricing	
TA NAME	Category	Description		Quantity 💌	Price 💌	Rev (\$000 2	Price 💌 R	ev (\$000 =
Tararua	Water	S/Rating Unit - All extraordinary users - quarterly minimum charge		9,618	\$131.01	\$1,260.0	\$0.00	\$0.0
Tararua	Water	S/Rating Unit - Pongaroa Water targeted rate	ating Unit - Pongaroa Water targeted rate				\$0.00	\$0.0
Tararua	Water	S/Rating Unit - Urban Water targeted rate - half charge	_	199	\$227.23	\$45.2	\$0.00	\$0.0
Tararua	Water	\$/Rating Unit - water metered rates / large Industrial and intake line charges	quarter	0	\$131.01	\$0.0	\$0.00	\$0.0
Tararua	Water	\$/SUIPs - Urban Water targeted rate - full charge		5,066	\$454.45	\$2,302.3	\$0.00	\$0.0
Tararua	Water	\$/Vol - All extraordinary users - meter fee cubic metre above 80m3 over three	months	0	\$2.174	\$0.0	\$0.00	\$0.0
Tararua	Water	\$/Vol - water metered rates / large Industrial and intake line charges - large In	/ol - water metered rates / large Industrial and intake line charges - large Industrial a				\$0.00	\$0.0
Tararua	Wastewater	S/Rating Unit - Urban wastewater - educational establishments and multi-uni	0	\$566.41	\$0.0	\$0.00	\$0.0	
Tararua	Wastewater	\$/Rating Unit - Urban wastewater targeted differential rate - for connected m	319	\$188.78	\$60.2	\$0.00	\$0.0	
Tararua	Wastewater	\$/Rating Unit - Urban wastewater targeted differential rate - half charge		174	\$283.20	\$49.3	\$0.00	\$0.0
Tararua	Wastewater	\$/SUIPs - Urban wastewater targeted differential rate - full charge		5,365	\$566.41	\$3,038.8	\$0.00	\$0.0
Tararua	Stormwater	\$/Rating Unit - Urban stormwater targeted rate	1	4,981	\$116.70	\$581.2	\$0.00	\$0.0
Masterton	Water	\$/Connection - Rural targted services rates - Tinui Water Supply		31	\$421.74	\$13.0	\$0.00	\$0.0
Masterton	Water	\$/Connection - urban (metered) Water supply on metered properties - minim	um charg	0	\$58.26	\$0.0	\$0.00	\$0.0
Masterton	Water	S/Connection - urban Water supply charge - connected		9,846	\$106.96	\$1,053.0	\$0.00	\$0.0
Masterton	Water	\$/CV - Sewerage supplied to Carterton properties		0	\$0.001840	\$0.0	\$0.00	\$0.0
Masterton	Water	S/CV - urban Water supply rate charged on connected and serviceable - estim	ated per	4,269,230,772	\$0.000565	\$2,413.0	\$0.00	\$0.0
Masterton	Water	\$/CV - urban Water supply rate charged on connected and serviceable - estim	651,538,462	\$0.001130	\$736.5	\$0.00	\$0.0	
Masterton	Water	5/LV - Rural targted services rates - Opaki Water Race		44,758,318	\$0.001385	\$62.0	\$0.00	\$0.0
Masterton	Water	\$/Vol - urban (metered) Water supply on metered properties - per cubic metr	e for betv	0	\$1.417	\$0.0	\$0.00	\$0.0
Masterton	Water	\$/Vol - urban (metered) Water supply on metered properties - per cubic metr	e for cons	0	\$1.826	\$0.0	\$0.00	\$0.0
Masterton	Water	S/Rating Unit - Uniform Water charge to Carterton properties	0	\$106.96	\$0.0	\$0.00	\$0.0	

There is capability within this model to analyse a new set of proposed changes to each individual tariff as in the above column green, to achieve the models revenue sufficiency and average price analysis goals.

Then access the positive negative impact on each individual household.







9. Risk

This section addresses the question: What should be the biggest focus or risk at this stage?

% price changes

The annual per capita price changes required in the Single council CCO are displayed in the following graph.

These annual per capita changes are also reflected by their CAGR which is the average annual compounding price change. A CAGR distils a series of annual prices into its the cumulative compounding average price increase, The CAGR is 9.4% over 10 years.



Tornado Graph

An assessment of the greatest impact to the overall pricing households will need to pay is displayed in the following Tornado graph, whereby each variable underpinning this model has been flexed +/- 10% then ranked in descending order of its impact on the CAGR % price increase.



The reason a Tornado analysis is performed is because financial forecasting is risky and requires the use of inputs and assumptions.

A risk assessment of this form allows the financial practitioners to understand how much risk is attributable to each assumption of input and then dedicate the right amount of time cost and effort to qualifying each input.



10. Financial Assumptions

This section documents all the assumptions used to model

The significant forecasting assumptions and estimates used to develop this 10-year forecast are identified.

With estimates and assumptions comes uncertainty. Where there is a high level of uncertainty, the reason for the uncertainty and an estimate of the potential effects on the financial forecasts is stated.

The level of uncertainty for each assumption refers to the difficulty of predicting outcomes because of limited knowledge. Some of the variables that affect future outcomes are outside any forecasts control, such as the wider economy, changes in legislation, and climate.

- Low level of uncertainty information available to the organisation point to a high likelihood of the assumption being accurate and/or most of the variables are under the organisation's control.
- Moderate level of uncertainty the organisation has most of the information available on the assumption but variables outside the organisation's control may still affect the accuracy of the assumption.

•	High level of uncertainty – the organisation has some of the information on the assumption
	but there is a high likelihood that variables outside the organisation's control will impact on
	the accuracy of the assumption

Major Assumption	Estimates applied	Level of Uncertainty
Start Date	The start date of the CCO has been set for the purpose of this report to be 1 June 2025.	
Set up Costs	There are budgets of \$1m per council to set up their CCO/STABU water delivery organisations. And a combined \$3m for the setup of Mult-council CCO. These can be borrowed back to Council from the "settled up" Organisation on day one when Assets and debt is transferred/vested into the Multi Council CCO.	
Population and development growth	 Population growth and the consequential demand for residential housing will be a driver for the CCO's Asset Management Plan (AMP). Population projections are used to forecast the level and location of development growth (the number of dwellings and floor space area) and therefore infrastructure requirements. The population projections information has been sourced from Statistics NZ (Stats NZ). The Stats NZ predictions are based on census data collected every five years. The current projections are based on the 2018 census data. It is recognised that the Stats NZ data may provide a conservative view of growth, as the projections do not consider the potential impact of planned development and changes to land use within the organisation area. 	Uncertainty: Low



Major Assumption	Estimates applied	Level of Uncertainty
	The average household occupancy is assumed to remain constant over the period at 2.9 people per household. No specific provision has been made for the potential impact of housing intensification on the average household size and infrastructure capacity requirements.	
	Connected properties as a proportion of the total population is assumed to remain constant.	
Starting Prices	The average prices are averages as such there are a number which is to represent range of individual different house hold prices, sometimes this can be a wide range.	Uncertainty: Low
	Council accounting and the financial treatment of back-office costs and general rates may have under estimated these starting day-one prices which are being representative of the portion of the current bill carved out to pay for water services delivery.	
	This report relies on an estimation of current council charging, however the year one pricing has been calculated within the CCO's financial settings so will provide a good estimation of the prices house hold will need to pay on day one and towards year 10. This may mean that the increases estimated for year one could be either overstated or understated, to this end it is important to pay careful observation to the comparative changes in pricing between the aggregation vs solo options as any overstatement or understatement will be the same in each option.	
Services Charged for	Only users of a Drinking or Waste water will be charged for the service. Storm water is forecast to be a service of the CCO and is charged across all households in the territorial authority.	
Fees and charges pricing	Fees and charges have been assumed to increase 20% to reflect a change in the market price of fees and services	Uncertainty: Low
Water Infrastructure Contributions (WICs) - Pricing	Water Infrastructure contribution prices would need to be calculated on the cost of growth-related capital expenditure set out in an asset management plan, divided by the projected Development Unit Equivalent (DUE) growth over the estimated capacity life of assets (or groups of assets). Future DUEs are projected for domestic and non-domestic growth to calculate the total expected DUE's.	Uncertainty: High
	For the purposes of this model all current Water Infrastructure Contribution (WIC's) charged by Councils have been increased by 20% to reflect a proxy for a growth pays for growth policy.	
Base Operational Expenditure	The base operational expenditure is from updated budgets in local authorities' 2024/25 Annual Plans. The base operational expenditure is then adjusted for inflation using the BERL LCGI Opex inflation and population growth over the 10 years of the plan. Base operational expenditure is subject to Opex efficiency.	Uncertainty: Low



Major Assumption	Estimates applied	Level of Uncertainty			
Additional WSE Operational Expenditure	Additional WSE operational expenditure has been added to reflect new expenses incurred because of reform. Reform costs which apply to all entities across the country have been allocated based on a proportional basis using a percentage of the national population.	Uncertainty: Moderate			
	Reform costs are adjusted by BERL Opex inflation and population growth per year. The additional WSE operational expenditure is not subject to any efficiency.				
Vulnerable Customer assistance	Additional operational expenditure is allowed for vulnerable consumer assistance. This allowance is 1% of total domestic service revenue each year. This expense is not subject to any efficiency.	Uncertainty: Low			
Consequential Opex	Additional operation expenses are allowed for the increase in costs associated with new capital works. Consequential Opex has been forecast at 1.5% of the delta between the LTP planned capital expenditure for growth and level of service assets and the AMP capital expenditure for growth and level of service assets. This is a cumulative expense each year.	Risk: Moderate			
	The additional consequential Opex expense is subject to operation expenses efficiency.				
CCO paying rates back to	In the previous 3 waters legislation the Water entities were legislated to pay rates back to Councils (based on land value not the capital portion).				
council	That was with a different policy and the business vehicle was to be a Water services organisation which was to be completely separate from councils.				
	This policy is to form a CCO which is closer to councils.				
	There is a case where the Auckland council took Watercare to court to pay the council rates for the water network. In Watercare's constitution it is stipulated that Watercare would not pay a dividend back to council, (any free cash results in dropped pricing to households).				
	Watercare was successful in getting the courts to agree that paying a rate back to council (as a CCO) would constitute a dividend, and would contravene the Water care constitution.				
	Therefore, in this analysis the Multi Council CCO is assumed to not have to pay rates back to Council.				
Interest rates	The interest rates on borrowings used in this forecast are:	Uncertainty: Low			
	Year Interest rates				
	2024/25 5.08%				
	2025/26 4.92%				
	2026/27 4.93%				

Major Assumption	Estimates a	pplied			Level of Uncertainty
	2027/28	4.93%			
	2028/29	4.93%	_		
	2029/30	4.92%	_		
	2030/31	4.92%	_		
	2031/32	4.92%	_		
	2032/33	4.92%	_		
	2033/34	4.92%			
	These rates organisation	assume that a S&P GI n at BBB+ Credit ratin	obal SACR I g.	Borrowing rate for a Borrowing	
	Borrowingt the margin	hrough LGFA may resu on the liquidity stand	ılt in lower i by facility.	nterest rates, and will also incur	
Capitalised Interest	This plan as	sumes that no interes	st is capitali	ised.	Uncertainty: low
Inflation	Separate inflation rates have been used for the operational and capital budgets due to the different cost drivers that impact these types of cost. Business and Economic Research Ltd (BERL) are contracted on behalf of the local government sector to provide inflation forecasts for budgeting and planning purposes. These forecasts are related to the types of costs that the local government sector and water services entities are likely to incur. The BERL Local Government Cost Index (LGCI) rates for Opex as the operational expenses inflation and Water, Sewer, Drainage, and Waste Services for capital expenditure inflation have been used. Inflation rates assumed in financial forecasts are as follows:				Uncertainty: Low
	Year	Operating inflation - Council (LGCI OPEX)	Capital inflation		
	2024/25	2.70%	3.60%		
	2025/26	2.20%	2.50%		
	2026/27	2.20%	2.70%		
	2027/28	2.20%	2.60%		
	2028/29	2.10%	2.50%		
	2029/30	2.00%	2.30%		
	2030/31	2.00%	2.30%		

Major Assumption	Estimates applied			Level of Uncertainty		
	2031/32	1.90%	2.20%			
	2032/33	1.90%	2.10%			
	2033/34	1.90%	2.10%			
Opening Assets	The opening a closing asset 2% for FY24 t The opening	pening assets have been rolled forward from the Annual Plan 2022/23 ig asset position, plus LTP projected capex for FY24, less depreciation at ir FY24 to get the opening asset position at 1 July 2025. pening assets are:			Uncertainty: Low	
	Asset Type	Value at 1 July	/ 2024			
	Wastewater	\$247.7m				
	Stormwater	\$38.5m				
	Water	\$227.4m				
	Total	\$564.1m				
	required. The opening borrowings assumptions used for financial modelling are:				ng are:	Moderate – Relied on roll forward calculations
	Asset Type		Value at	1 July 2025		
	Wastewater		\$82.5m		-	
	Stormwater		\$2.9m		-	
	Water		\$33.7m		-	
	Start Up Co	sts	\$3m		-	
	Estimated a	dditions to Debt	\$45m			
Capital cost projections	I total \$168.4m Cost projections for individual capital projects are based on the best available information at the time of planning, and will be subject to ongoing refinement – with major changes expected in the finalisation of the combined regional AMP and business planning alongside potential vendors.			Uncertainty: Moderate		
Business efficiency	The Opex efficiency target is applied to base operational expenses and consequential Opex. The Capex efficiency target is applied to growth and level of service capital expenditure spend. Savings will be achieved without changing the services the community receives.			Uncertainty: Moderate		

Major Assumption	Estimates applied	Level of Uncertainty			
Asset revaluations	Assumes assets are not rev less depreciation.	Uncertainty: Low			
Useful life of asset additions	 f The useful lives of significant assets with the appropriate depreciation rates are shown in the table below. It is also assumed that: the useful lives will remain the same throughout the 10-year planning period. that assets will be replaced at the end of their useful lives. assets are depreciated on a straight-line basis over their useful lives with annual depreciation expense included in the total costs for each service. 				
	Asset Class	Estimated useful life (years)			
	Infrastructure				
	Water	55			
	Wastewater	70			
	Stormwater	100			
	Other infrastructure	Out of Scope			
	Operational				
	Land	Out of Scope			
	Buildings	Out of Scope			
	Other operational assets	Out of Scope			
	Intangible assets				
	Computer software	Out of Scope			
Remaining useful life of any other	Other intangible assets Out of Scope Remaining iseful life of any other The remaining weighted useful life of assets to be transferred are assumed to be:				
assets transferred	Asset Class	Estimated useful life (years)			
	Infrastructure				
	Water	50			
	Wastewater	50			
	Stormwater	50			
	Other infrastructure	Out of Scope			
	Operational				
	Land	Out of Scope			
	Buildings	Out of Scope			



Major Assumption	Estimates applied			Level of Uncertainty	
	Other operational assets	Out of Scope			
	Intangible assets				
	Computer software	Out of Scope			
	Other intangible assets	Out of Scope			
Vested assets	Vested assets are assets tr their obligations under their infrastructure contribution	ransferred from developers to ouilding and resource conse agreements.	the CCO to meet nt conditions or	Uncertainty: Moderate	
	Vested asset income is in difficult to forecast. It has to be the set of the	nconsistent from year-to-year therefore not been forecast.	and therefore is		
	Vested asset income has no No allowance is made to inc of vested assets.	o cash impact therefore any fir crease the network asset value	nancial risk is low. from the addition		
Average drinking water consumption per capita	Average drinking water consumption per capita is assumed to be stable and consistent across all local authorities where applicable.			Uncertainty: Low	
Average volume of wastewater as a percentage of water consumption	Average waste water discharge per capita is assumed to be stable and consistent across all local authorities where applicable.			Level of uncertainty: Low	
Levels of	For this forecast, assumed	that:		Uncertainty:	
service	 the current demand for water services and customer expectations regarding business-as-usual levels of service will not change during the planning period 			Low	
	 there is no other significant impact from external pressures on asset requirements or operating expenditure, beyond what is specifically planned for in this 10-year plan 				
Climate and natural hazards	The ability to deliver plan affected if climate change c we are already experienci Gabrielle.	ned levels of service to the co occurs faster or with greater im ng with recent flooding and e	mmunity may be pact, such as what effects of Cyclone	Uncertainty: High	
	If this occurs, unbudgeted emergency work may need to be carried out. Additional costs may also be incurred to mitigate impacts, such as improving protection of critical infrastructure or increasing maintenance.				

Major Assumption	Estimates applied	Level of Uncertainty
	No contingency is assumed in the model.	
Resource Management Reforms	The Resource Management Act 1991 (RMA) is the main law governing how people interact with natural resources. The Government plans to repeal the RMA and enact new laws to create a resource management (RM) system that will safeguard the wellbeing of current and future generations. The information that has been made available through the proposed Natural and Built Environment Bill and Spatial Planning Bill suggests that the potential risk to materially impact this forecast is high. However, we cannot anticipate the impact of future legislative changes as a result of the select committee process and their timing. Therefore, this plan has been developed based on current legislation, regulations, and policy.	Uncertainty: High
Income Tax	It is assumed that the organisation is a public purpose Crown-controlled organisation under the Income Tax Act 2007 for income tax purposes and is therefore not liable to pay income tax.	Uncertainty: Low

The following table represents to salary estimates and expenses which should be needed in the three scenarios.

	Stand Alone Business Unit	Single Council CCO	Single Council CCO
Chief Executive	-	400,000	400,000
Board of Directors	-	210,000	210,000
CFO	-	350,000	350,000
Treasury Function	-	-	300,000
Annual Credit rating	-	-	500,000
Annual Reports	-	100,000	100,000
Additional Financial and	840,000	840,000	840,000
Regulatory fees	429,193	429,193	429,193
Separate building	-	250,000	250,000
Staff Transitioned	-		

Note that these assumptions and risks are not an exhaustive list of the assumptions and risks. These contain risks and assumptions that are more specific in nature.


11. Financial Outputs

This section Displays the PandL, Balance sheet and Cash flow statements underpinning these reports financial analysis

Masterton Single Council Water Services CCO/STABU

Summary sheet (\$000's)	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	Total
	Prior year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Domestic Connections	9 588	9.636	9.684	9 732	9.779	9.813	9 847	9.881	9 916	9.950	9.970	9 991	
bomeste connections	5,500	5,050	3,004	5,752	5,775	5,015	5,047	5,001	5,510	5,550	5,570	5,551	
Revenue													
Domestic Service Charges	14,038	-	14,038	14,038	14,038	14,038	14,038	14,038	14,038	14,038	14,038	14,038	154,416
Non-Domestic Service Charges	2 205	-	-	-	-	-	-	-	-	-	-	-	0
Fees	2,265	-	1,742	1 293	1 293	1 293	1 293	1 293	1 293	1,742	1,742	1,742	29,705
Revenue Gap	-	-	2,694	2,091	3,983	5,227	6,568	8,138	9,838	11,706	13,678	15,779	79,702
Total Revenue	17,400		20,767	20,164	22,056	23,300	24,640	26,211	27,910	29,779	31,751	33,852	277,830
													CAGR
Total Revenue % change			19.3%	-2.9%	9.4%	5.6%	5.8%	6.4%	6.5%	6.7%	6.6%	6.6%	6.9%
Total Revenue per cap % change			18.8%	-3.4%	8.9%	5.3%	5.4%	6.0%	6.1%	6.3%	6.4%	6.4%	
Total Demontis Devict Change			0.0%	0.0%	0.000	0.000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Domestic Rev % Change			-1.0%	-0.5%	-0.5%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.2%	-0.2%	
Total Domestic and gap Rev per cap % Change			18.0%	-4.1%	11.2%	6.5%	6.6%	7.3%	7.3%	7.5%	7.4%	7.4%	6.7%
Opex	_	0	(7,653)	(7,893)	(9,129)	(9,614)	(10,119)	(10,678)	(11,244)	(11,881)	(12,535)	(13,237)	(103,983)
Total Expenses		0	(7,653)	(7,893)	(9,129)	(9,614)	(10,119)	(10,678)	(11,244)	(11,881)	(12,535)	(13,237)	(103,983)
EBITDA	_		13,114	12,271	12,927	13,685	14,522	15,533	16,666	17,897	19,216	20,615	156.447
EBITDA % of Revenue			63%	61%	59%	59%	59%	59%	60%	60%	61%	61%	
Depreciation		(4,938)	(4,938)	(5,448)	(5,624)	(5,820)	(6,421)	(6,660)	(6,920)	(7,634)	(7,938)	(8,263)	(70,604)
Interest		0	(2,594)	(2,629)	(2,/28)	(2,865)	(3,039)	(3,244)	(3,475)	(3,729)	(4,002)	(4,294)	(32,600)
NPAT		- 4,938	5,582	4,194	4,575	5,000	5,061	5,629	6,271	6,535	7,276	8,058	53,243
Capex		0	(0.28)	(1.065)	(1 102)	(1 2 2 2)	(1.451)	(1 5 9 2)	(1 714)	(1 946)	(1.070)	(2.114)	(15 102)
Wastewater		0	(928)	(1,005)	(1,193)	(7,271)	(1,451)	(1,562)	(1,/14)	(1,646)	(1,979)	(2,114)	(15,192) (83,577)
Water		0	(3,876)	(4,449)	(4,982)	(5,522)	(6,062)	(6,610)	(7,160)	(7,711)	(8,267)	(8,830)	(63,469)
SUM		0	(9,908)	(11,372)	(12,735)	(14,115)	(15,494)	(16,897)	(18,303)	(19,710)	(21,133)	(22,571)	(162,238)
		-	-	-	-	-	-	-	-	-	-	-	
Natural Valua													
Wastewater		134,559	139.662	150.748	143.135	154.838	161.814	159.941	167.517	181.858	174.171	189.097	189.097
Stormwater		41,587	42,515	45,919	42,842	46,364	47,607	46,999	48,358	52,477	49,292	53,525	53,525
Water		69,909	73,785	79,696	77,096	83,457	88,797	87,956	93,726	101,863	99,334	107,883	107,883
SUM		246,054	255,962	276,363	263,073	284,659	298,218	294,896	309,601	336,197	322,797	350,505	350,505
Cash flows												•	
Operating Inflows		0	16,544	17,471	19,159	20,455	21,788	23,340	25,029	26,883	28,847	30,937	230,453
Operating Outflows		0	(7,024)	(7,873)	(9,027)	(9,574)	(10,077)	(10,632)	(11,197)	(11,829)	(12,481)	(13,179)	(102,895)
Investing Outflows		0	(9.093)	(11 252)	(12 623)	2,742	(15 381)	2,742	2,742	(10 505)	(21.016)	(22,742	(160 383)
Financing Inflows		0	(349)	1.540	2,478	3.244	3.967	4.575	5.090	5.527	5.911	6.247	38.231
Financing Outflows		0	(2,594)	(2,629)	(2,728)	(2,865)	(3,039)	(3,244)	(3,475)	(3,729)	(4,002)	(4,294)	(32,600)
check		0	0	0	0	0	0	0	0	0	0	0	
Operational and Investing Inflows		0	19.060	20 213	21 901	23 197	24 530	26.082	27 771	29.625	31 589	33 679	
Investing Outflows		0	(7,024)	(7,873)	(9,027)	(9,574)	(10,077)	(10,632)	(11,197)	(11,829)	(12,481)	(13,179)	
Financing outflows		0	(2,594)	(2,629)	(2,728)	(2,865)	(3,039)	(3,244)	(3,475)	(3,729)	(4,002)	(4,294)	
Capital Investment		0	(9,093)	(11,252)	(12,623)	(14,002)	(15,381)	(16,781)	(18,188)	(19,595)	(21,016)	(22,453)	
EEQ.(\$)	-	-	9 442	9 711	10 145	10 758	11 414	12 206	13 098	14 067	15 105	16 206	
100	_		3,442	5,711	10,145	10,750	11,414	12,200	13,030	14,007	10,100	10,200	
Total Debt	42,682	54,301	53,953	55,493	57,971	61,215	65,182	69,757	74,847	80,375	86,285	92,532	
Credit Assessment (Millions)													
Core Ratios													
FFO / Debt (%)			17.5%	17.5%	17.5%	17.6%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	
Debt / EBITDA (x)			4.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Supplementary coverage ratios			200%	275%	203%	203%	205%	205%	208%	270%	212%	2/3%	
FFO interest cover (x)			4.6	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	
EBITDA / interest (x)			5.1	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	



South Wairarapa District Council Single Council Water Services CCO/STABU

Summary sheet (\$000's)	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	Total
	Prior year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
			1007		1.055								
Domestic Connections	3,959	3,983	4,007	4,031	4,055	4,068	4,082	4,096	4,109	4,123	4,133	4,143	
Payanua													
Domestic Service Charges	9.414		9.414	9 4 1 4	9.414	9 4 1 4	9.414	9 4 1 4	9 4 1 4	9414	9.414	9 4 1 4	103 554
Non-Domestic Service Charges	3,414		-	-	-	-	-	-	-	-	-	-	00,004
Water Infrastructure Contributions	400	-	480	480	480	480	480	480	480	480	480	480	5.200
Fees	371		445	445	445	445	445	445	445	445	445	445	4,823
Revenue Gap	-	-	9,879	10,660	12,547	14,499	16,614	18,859	21,075	23,612	26,180	28,873	182,797
Total Revenue	10,185		20,218	21,000	22,886	24,838	26,953	29,198	31,414	33,951	36,519	39,212	296,374
													CAGR
Total Revenue % change			98.5%	3.9%	9.0%	8.5%	8.5%	8.3%	7.6%	8.1%	7.6%	7.4%	14.4%
Total Revenue per cap % change			97.3%	3.276	0.376	8.2%	8.276	8.0%	7.276	7.7%	7.3%	7.176	
Total Domestic Rev % Change			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Domestic Rev per cap % Change			-1.2%	-0.6%	-0.6%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.2%	-0.2%	
Total Domestic and gap Rev per cap % Change			102.5%	3.4%	8.8%	8.5%	8.5%	8.3%	7.5%	8.0%	7.5%	7.3%	13.1%
Opex		0	(9,512)	(9,774)	(10,054)	(10,309)	(10,582)	(10,885)	(11,208)	(11,566)	(11,950)	(12,369)	(108,209)
Total Expenses		0	(9,512)	(9,774)	(10,054)	(10,309)	(10,582)	(10,885)	(11,208)	(11,566)	(11,950)	(12,369)	(108,209)
EBITDA		-	10,707	11,226	12,832	14,528	16,372	18,314	20,206	22,385	24,569	26,843	177,981
EDITUM % OT REVENUE			53%	53%	56%	58%	61%	63%	64%	66%	67%	68%	
Depreciation		(1.850)	(1 850)	(2.201)	(2 421)	(2 620)	(3.170)	(3.490)	(3 8 2 0)	(4 450)	(4 872)	(5.310)	(26 170)
Interest		(0.0,1)	(1,830)	(2,201)	(2,431)	(2,089)	(3,170)	(3,489)	(3,039)	(4,459)	(4,673)	(4 987)	(30,170)
		0	(_,	(=,= 34)	(2,232)	(2,233)	(2,233)	(2,232)	(=,: +1)	(.,=+0)	(.,	(1,227)	(32,030)
NPAT		- 1,850	7,026	6,960	8,049	9,174	10,199	11,464	12,626	13,785	15,142	16,537	109,112
Capex													
Stormwater		0	(142)	(163)	(185)	(208)	(231)	(255)	(280)	(306)	(332)	(360)	(2,462)
Wastewater		0	(8,915)	(10,232)	(11,490)	(12,772)	(14,061)	(15,379)	(16,710)	(18,051)	(19,416)	(20,805)	(147,832)
Water CLIMA	·	0	(3,915)	(4,494)	(5,093)	(5,/13)	(5,349)	(7,009)	(7,689)	(8,385)	(9,108)	(9,856)	(67,611)
3010		U	(12,572)	(14,030)	(10,708)	(10,033)	(20,041)	(22,043)	(24,073)	(20,742)	(20,030)	(31,020)	(217,503)
Network Value													
Wastewater		29,906	38,820	42,384	49,447	54,128	67,127	68,026	82,137	90,782	99,258	109,015	109,015
Stormwater		23,852	23,994	25,917	23,715	25,659	25,805	25,420	25,589	27,721	25,394	27,550	27,550
Water		47,168	51,084	55,316	55,074	59,834	65,482	65,330	71,530	78,291	78,586	85,930	85,930
Water SUM	_	47,168 100,926	51,084 113,898	55,316 123,617	55,074 128,236	59,834 139,621	65,482 158,415	65,330 158,775	71,530 179,255	78,291 196,794	78,586 203,238	85,930 222,495	85,930 222,495
Water SUM	= :	47,168 100,926	51,084 113,898	55,316 123,617	55,074 128,236	59,834 139,621	65,482 158,415	65,330 158,775	71,530 179,255	78,291 196,794	78,586 203,238	85,930 222,495	85,930 222,495
Water SUM		47,168 100,926	51,084 113,898	55,316 123,617	55,074 128,236	59,834 139,621	65,482 158,415	65,330 158,775	71,530 179,255	78,291 196,794	78,586	85,930 222,495	85,930 222,495
Water SUM Cash flows		47,168	51,084 113,898	55,316 123,617	55,074 128,236	59,834 139,621	65,482 158,415	65,330 158,775	71,530 179,255	78,291 196,794	78,586	85,930 222,495	85,930 222,495
Water SUM Cash flows Operating Inflows Operating Uniflows Operating Outflows Operating Outflows Operating Outflows Operating Outflows Operating Outflows Operating Outflows Operating Oper		47,168 100,926	51,084 113,898 18,116 (8,730)	55,316 123,617 20,455 (9,752)	55,074 128,236 22,251 (10,031)	59,834 139,621 24,197 (10,288)	65,482 158,415 26,300 (10,559)	65,330 158,775 28,534 (10,860)	71,530 179,255 30,752 (11,182)	78,291 196,794 33,263 (11,537)	78,586 203,238 , , 35,828 (11,918)	85,930 222,495	278,206 (107,192)
Water SUM Cash flows Operating Inflows Operating Outflows Investing Inflows		47,168 100,926 0 0 0	51,084 113,898 18,116 (8,730) 441	55,316 123,617 20,455 (9,752) 480	55,074 128,236 22,251 (10,031) 480	59,834 139,621 24,197 (10,288) 480	65,482 158,415 26,300 (10,559) 480	65,330 158,775 28,534 (10,860) 480	71,530 179,255 30,752 (11,182) 480	78,291 196,794 33,263 (11,537) 480	78,586 203,238	85,930 222,495	85,930 222,495 278,206 (107,192) 4,761
Water SUM Cash flows Operating (Inflows Operating Outflows Investing (Inflows Investing Outflows		47,168 100,926 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906)	55,316 123,617 20,455 (9,752) 480 (14,732)	55,074 128,236 22,251 (10,031) 480 (16,614)	59,834 139,621 24,197 (10,288) 480 (18,535)	65,482 158,415 26,300 (10,559) 480 (20,480)	65,330 158,775 28,534 (10,860) 480 (22,479)	71,530 179,255 30,752 (11,182) 480 (24,512)	78,291 196,794 33,263 (11,537) 480 (26,573)	78,586 203,238	85,930 222,495 38,511 (12,334) 480 (30,842)	85,930 222,495 278,206 (107,192) 4,761 (215,356)
Water SUM Cash flows Operating fulflows Operating Outflows Investing Inflows Investing Qutflows Financing Inflows		47,168 100,926 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507	78,586 203,238 35,828 (11,918) 480 (28,682) 8,847	85,930 222,495	85,930 222,495 278,206 (107,192) 4,761 (215,356) 72,279
Water SUM Cash flows Operating flows Operating fullows Investing fullows Financing fullows Financing fullows Financing fullows		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831)	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064)	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352)	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665)	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003)	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361)	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741)	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140)	78,586 203,238 35,828 (11,918) 480 (28,682) 8,847 (4,555)	85,930 222,495 , , , , , , , , , , , , , , , , , , ,	85,930 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,598)
Water SUM Cash flows Operating fulflows Investing fulflows Investing fulflows Financing fulflows Financing fulflows Financing clutflows Check		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) 0	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0	78,586 203,238 35,828 (11,918) 480 (28,682) 8,847 (4,555) 0	85,930 222,495	85,930 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating Inflows Operating Outflows Investing offlows Investing outflows Financing Outflows Financing Outflows Financing Outflows Financing Outflows Financing Toutflows Financing Finan		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0	71,530 179,255 (11,182) 480 (24,512) 8,203 (3,741) 0	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0	78,586 203,238 35,828 (11,918) 480 (28,682) (28,682) (4,555) 0	85,930 222,495	85,930 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating fulfows Operating Outflows Investing findows Investing fulfows Financing fulfows Financing Outflows Financing Outflows Financing fulfows Financing fulfows Finan		47,168 100,926 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0 20,035	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 0	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,200	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) 0	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0	78,586 203,238 (11,918) 480 (28,682) 8,847 (4,555) 0	85,930 222,495	85,930 222,495 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating inflows Operating Outflows Investing offlows Investing outflows Financing Inflows Financing Outflows Financing outflows Financing Inflows Finan		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0 18,557 (0,750)	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0 20,935 (0,772)	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,021)	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0 24,677 (10,200)	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559)	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0 29,014 (10,960)	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) 0 31,232 (11,102)	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 33,743 (11,527)	78,586 203,238 (11,918) 480 (28,682) 8,847 (4,555) 0 36,308	85,930 222,495	8,590 222,495 278,206 (07,192) 4,761 (21,536) 72,279 (32,598)
Water SUM Cash flows Operating Inflows Operating Outflows Investing Inflows Investing Outflows Financing Inflows Financing Outflows Check FIO Operational and Investing Inflows Investing Outflows Enancing Inflows		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0 18,557 (8,730) (1,831)	55,316 123,617 20,455 (9,752) 4800 (14,732) 5,614 (2,064) 0 20,935 (9,752) (9,752) (9,752) (2,064)	55,074 128,236 22,251 (10,031) 4800 (16,614) 6,266 (2,352) 0 22,731 (10,031) (3,552) (3,55	59,834 139,621 24,197 (10,288) 4800 (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665)	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) 0	65,330 158,775 28,534 (10,860) 4800 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361)	71,530 179,255 30,752 (11,182) 4800 (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741)	78,291 196,794 33,263 (11,537) 4800 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140)	78,586 203,238 35,828 (11,918) 480 (28,682) 8,847 (4,555) 0 36,308 (11,918) 4555) (4,555)	85,930 222,495 38,511 (12,334) 480 (30,842) 9,173 (4,987) 0 38,991 (12,334) (4,987) 0	85390 222,495 278,206 (107)192) 4,761 (215,556) 72,279 (32,698)
Water SUM Cash flows Operating inflows Operating Outflows Investing outflows Investing outflows Financing flom/sws Financing outflows Financing outflows Check FFO Operational and Investing Inflows Financing outflows Financ		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (1,906) (1,831) 0 18,557 (8,730) (1,381) (1,381)	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732) (14,732)	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614)	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665) (18,535)	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) (20,480)	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,479)	71,530 179,255 30,752 (11,182) 480 (24,512) (3,741) 0 31,232 (11,182) (3,741) 0	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140) (26,573)	78,586 203,238 35,828 (11,918) 480 (28,682) 0 36,308 (11,918) (4,555) 0 36,308	85,930 222,495 38,511 (12,334) 480 (30,842) 9,173 (4,987) 0 38,991 (12,334) (4,987) (30,842)	85,303 222,495 278,206 (407,192) 4,761 (215,356) 77,279 (32,698)
Water SUM Cash flows Operating Inflows Operating Outflows Investing Inflows Investing Outflows Prancing Inflows Prancing Inflows Check FO Operational and Investing Inflows Investing Outflows Financing Outflows Financing Outflows Financing Outflows Capital Investment		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0 (1,831) (11,906)	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732)	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614)	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665) (18,535)	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480)	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,479)	71,530 179,255 30,752 (11,182) 480 (24,512) 31,232 (11,182) 331,232 (11,182) (3,741) (24,512)	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140) (26,573)	78,586 203,238 35,828 (11,918) 480 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682)	85,930 222,495 38,511 (12,334) 480 (30,842) 9,173 (4,987) 0 38,991 (12,334) (4,987) (30,842)	85,930 222,495 278,206 (107,192) 4,752 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating fulflows Operating Outflows Investing fulflows Investing Outflows Financing fulflows Financing fulflows Fo Operational and Investing Inflows Investing Outflows Financing Financing Financing Outflows Financing Fina		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) (1,831) 0 18,557 (8,730) (1,831) (1,906) 7,996	55,316 123,617 20,455 (9,752) 480 (14,732) 5,514 (2,064) 0 20,935 (9,752) (2,064) (14,732) 20,935 (9,752) (2,064) (14,732)	55,074 128,236 22,251 (10,031) 480 (16,614) 6,256 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665) (18,535) 11,724	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) (20,480) 13,217	65,330 158,775 28,534 (10,660) 480 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,479) 14,793	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (24,512) 16,309	78,291 196,794 33,263 (11,537) 480 (26,573) (8,507 (4,140) 0 33,743 (11,537) (4,140) (26,573) 18,065	78,586 203,238 35,828 (11,918) 480 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682) 19,835	85,930 222,495 38,511 (1,334) 4800 (30,842) 9,173 (4,987) 0 0 38,991 (12,334) (4,987) (30,842) 21,669	85,900 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating Inflows Operating Outflows Investing Outflows Investing Outflows Financing Inflows Financing Outflows Financing Outflows Financing Outflows Check FO Operational and Investing Inflows Investing Outflows Financing Financing Outflows Financing Financing Outflows Financing Financi		47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,331) 0 18,557 (8,730) (1,831) (11,906) (11,906) (11,906)	55,316 123,617 20,455 (9,752) 4800 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732) 9,119	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (16,031) (16,514) 10,348	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665) (2,665) (18,535) 11,724	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) (20,480) 13,217	65,330 158,775 28,534 (10,860) 480 (2,2,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (2,2,479) 14,793	71,530 179,255 30,752 (11,182) 4800 (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (24,512) (24,512) (24,512) (24,512) (24,512)	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140) (26,573) (4,140) (26,573) 18,065	78,586 203,238 35,828 (11,918) 4880 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682) 19,835	85,930 222,495 38,511 (1,334) 4800 (30,842) 9,173 (4,987) 0 0 38,991 (12,334) (4,987) (30,842) 21,669	85,900 222,495 278,206 (07,120) 4,761 (215,356) 72,279 (32,598)
Water SUM Cash flows Operating fulfows Investing fulfows Investing fulfows Financing fulfows Financin	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) (1,906) 7,996 39,979	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732) 9,119 45,592	55,074 128,236 22,251 (10,031) 4800 (16,614) (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858	59,834 139,621 24,197 (10,288) 480 (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665) (18,535) 11,724 58,669	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) (20,480) 13,217 65,932	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) (22,479) 0 29,014 (10,860) (3,361) (22,479) 14,793 73,618	71,530 179,255 30,752 (11,182) 480 (24,512) (24,512) (3,741) (3,741) (24,512) (3,741) (24,512) 16,309 81,820	78,291 196,794 33,263 (11,537) 4800 (26,573) 8,507 (4,140) (26,573) (4,140) (26,573) 18,065 90,328	78,586 203,238 35,828 (1,1,918) 4800 (28,682) 0 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175	85,930 222,495 38,511 (12,334) 480 (30,842) 9,173 (4,987) (30,842) 0 0 38,991 (12,334) (4,987) (30,842) 21,669	85,300 222,495 278,206 (107,192) 4,761 (215,356) 77,279 (32,698)
Water SUM Cash flows Operating inflows Operating Outflows Investing outflows Investing outflows Financing Inflows Financing Inflows Financing Inflows Financing Outflows Ceheck FFO Operational and Investing Inflows Investing Outflows Capital Investment FFO (5) Total Debt	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0 18,557 (8,730) (1,831) (1,906) 7,996 39,979	55,316 123,617 20,455 (9,752) 4800 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732) 20,935 (9,752) 20,935 (9,752) 48,000 0 20,935 (9,752) 48,000 0 20,935 (9,752) 48,000 0 20,935 (9,752) 48,000 0 20,935 (9,752) 48,000 0 20,935 (9,752) 48,000 0 0 20,935 (9,752) 48,000 0 0 20,935 (9,752) 48,000 0 0 20,935 (9,752) (9,752) (9,7	55,074 128,236 22,251 (10,031) 4800 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858	59,834 139,621 24,197 (10,288) 4800 (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665) (18,535) 11,724 58,669	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (10,559) (2,0480) 13,217 65,932	65,330 158,775 28,534 (10,860) 4800 (22,479) 7,886 (3,361) (22,479) 29,014 (10,860) (3,361) (22,479) 14,793 73,618	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (24,512) 16,309 81,620	78,291 196,794 33,263 (11,537) 4800 (26,573) 8,507 (4,140) (26,573) 0 33,743 (11,537) (4,140) (26,573) 18,065 90,328	78,586 203,238 35,828 (11,918) 4800 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175	85,930 222,495	85,300 222,495 278,206 (07,192) 4,761 (21,536) 72,279 (32,598)
Water SUM Cash flows Operating fulflows Operating Outflows Investing fulflows Investing Outflows Financing Inflows Financing outflows Check FFO Operational and Investing Inflows Investing Outflows Financing Inflows Financing Inflows Financing Inflows Financing Outflows Financing Outflows Financing Inflows Financing Outflows Financing Out	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) (1,831) (1,831) (1,831) (1,831) (1,831) (1,831) (1,906) 7,996	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732) 9,119 45,552	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858	59,834 139,621 24,197 (10,288) 480 (16,535) 0 (16,535) (2,665) (18,535) 11,724 58,669	65,482 158,415 26,530 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,914 (10,860) (3,361) (22,479) 14,793 73,618	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (2,512) 16,309 81,820	78,291 196,794 33,263 (11,57) 480 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140) (26,573) 18,065 90,328	78,586 203,238 35,828 (11,918) 480 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682) 219,835 19,835	85,930 222,495	85390 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating inflows Operating Outflows Investing outflows Investing outflows Financing inflows Financing outflows Check FFO Operational and Investing Inflows Financing outflows Financi	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0 18,557 (8,730) (1,831) (1,831) (1,906) 7,996 39,979	55,316 123,617 20,455 (9,752) 4800 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732) 9,119 45,592	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858	59,834 139,621 24,197 (10,288) 4800 (18,535) 6,811 (2,665) (18,535) 24,677 (10,288) (2,665) (18,535) 11,724 58,669	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932	65,330 158,775 28,534 (10,660) 480 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,479) 14,793 73,618	71,530 179,255 30,752 (11,182) (11,182) (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (24,512) 16,309 81,820	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140) 0 26,573) 18,065 90,328	78,586 203,238 35,528 (11,918) 480 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175	85,930 222,495	85,300 222,495 278,206 (407,192) 4,761 (215,366) 77,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating Outflows Investing fulfows Investing fulfows Financing inflows Financing fulfows Check FO Operational and Investing Inflows Investing Outflows Financing outflows Financing fulfows Financing Inflows Financing Financi	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) 0 18,557 (8,730) (1,831) (1,831) (1,906) 7,996 39,979	55,316 123,617 20,455 (9,752) 480 (14,732) 5,514 (2,064) 0 20,935 (9,752) (2,064) (14,732) 9,119 9,119	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858	59,834 139,621 24,197 (10,288) 480 (18,535) 0 24,677 (10,288) (2,665) 24,677 (10,288) (2,665) 11,724 58,669	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932	65,330 158,775 28,534 (10,860) 480 (22,479) 7,886 (3,361) 0 29,014 (10,860) (3,361) (22,479) 14,793 73,618	71,530 179,255 30,752 (11,182) 480 (2,45,12) 8,203 (3,741) 0 31,232 (11,182) (3,741) (2,512) 16,309 81,820	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140) (26,573) 18,065 90,328	78,586 203,238 (1,1,918) (1,1,918) (28,682) (8,884 (1,1,918) (4,555) (28,682) (1,918) (4,555) (28,682) (19,835 99,175	85,930 222,495 38,511 (12,334) 480 (30,842) 9,173 (4,987) (30,842) 0 38,991 (12,334) (4,987) (30,842) 21,669	85390 222,495 278,206 (107,192) 4,761 (215356) 77,279 (32,698)
Water SUM Cash flows Operating inflows Operating Outflows Investing outflows Investing outflows Financing inflows Financing outflows Check FFO Operational and Investing Inflows Financing outflows Financing outflows Capital Investing Outflows Financing outflows Financing outflows Financing outflows Financing Inflows Financing Inflows Financing Outflows F	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 0 (1,831) 0 (1,831) (11,906) 7,996 39,979	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) 0 20,935 (9,752) (2,064) (14,732) 9,119 45,592	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858	59,834 139,621 24,197 (10,288) 480 (18,535) 0 24,677 (10,288) (2,665) (16,535) 11,724 58,669	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,479) 14,793 73,618	71,530 179,255 30,752 (11,182) 480 (24,512) 0 31,232 (11,182) (3,741) 0 31,232 (11,182) (3,741) (24,512) 16,309 81,820	78,291 196,794 33,263 (11,537) 480 (26,573) (4,140) 0 0 33,743 (11,537) (4,140) (26,573) 18,065 90,328	78,586 203,238 35,528 (11,918) 480 (28,682) 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175	85,930 222,495 38,511 (12,334) 480 (30,842) 9,773 (4,987) 0 0 38,991 (12,334) (4,987) (30,842) 21,669	85,900 222,495 278,206 (107,192) 4,761 (215,356) 77,279 (32,698)
Water SUM Cash flows Operating inflows Operating Cutflows Operating Cutflows Investing follows Investing follows Financing inflows Financing cutflows Financing cutflows Financing cutflows Capital Investing Inflows Capital Investing Inflows Capital Investment FF0 (\$) Total Debt Credit Assessment (Millions)	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (13,910) (13,910) (14,931) (11,906) 7,996 39,979	55,316 123,617 20,455 (9,752) 480 (14,732) 5,752) (2,064) 0 20,935 (9,752) (2,064) (14,732) 5,752) (2,064) (14,732) 9,119 9,119	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) (16,614) 10,348 51,858	59,834 139,621 139,621 (10,288) (10,288) (18,535) 6,811 (2,665) 0 24,677 (10,288) (2,665) (18,535) (18,535) 11,724 58,669	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) (20,480) (20,480) (20,480) (20,480) (20,480) (3,003) (20,480) (20,659) 26,780 (10,559) (3,003) (20,659) (20,659	65,330 158,775 28,534 (10,660) 480 (2,2,479) 7,686 (3,361) 0 29,014 (10,660) (3,361) (2,2,479) 14,793 73,618	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) (24,512) (3,741) (24,512) (3,741) (24,512) 16,309 81,820	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) (26,573) (4,140) (26,573) 11,537) (4,140) (26,573) 11,537) (4,140) (26,573) 11,537) (4,140) (26,574) 11,537) (4,140) (26,574) 11,537) (4,140) (26,574) 11,537) (4,145) (26,574) 11,537) (4,145) (26,574) 11,537) (4,145) (26,574) 11,537) (4,145) (26,574) 11,537) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (4,145) (26,574) (26,574) (4,145) (26,574) (26,574) (26,574) (26,574) (26,574) (26,574) (26,574) (26,574) (26,574) (26,574) (26,574) (26,5774) (27,5774) (27,5	78,586 203,238 35,528 (11,918) 480 (28,622) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,622) 28,537 99,175	85,930 222,495 38,511 (12,334) 480 (30,842) 9,173 (4,987) (30,842) 0 38,991 (12,334) (4,987) (30,842) 21,669 21,669	85390 222,495 278,206 (107.192) 4,761 (215356) 77,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Investing fulfows Investing fulfows Financing	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (1,906) 3,910 (1,831) (1,906) 7,996 39,979 39,979 20,22 20,2	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) (14,732) (2,064) (14,732) 9,119 45,592 21,000 9,77	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858 51,858	59,834 139,621 24,197 (10,288) 480 (18,535) 0 24,655) (18,535) 24,665) (18,535) 11,724 58,669 24,84 4 24,84 24,84	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (2,0480) 26,780 (10,559) (3,003) (20,480) 13,217 65,932 26,95	65,330 158,775 28,534 (10,860) 480 (22,479) 7,886 (3,361) 0 29,014 (10,860) (3,361) (22,479) 14,793 73,618 29,20 4,756 29,20 29,20 - 10,88 - 29,20 - 20,20 - 20,2	71,530 179,255 30,752 (11,182) 480 (24,512) 0 31,232 (11,182) (3,741) 0 31,232 (11,182) (3,741) (24,512) 16,309 81,820 81,820	78,291 196,794 33,263 (11,537) 480 (26,573) (4,140) 0 (4,140) (26,573) 18,065 90,328 90,328	78,586 203,238 35,528 (11,918) 480 (28,682) 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175 99,175	85,930 222,495	85,300 222,495 278,206 (107,192) 4,761 (215,356) 7,2,279 (32,698)
Water SUM Cash flows Operating inflows Operating Unflows Operating Unflows Investing Unflows Investing Unflows Financing Unflows Financing Unflows Financing Unflows Financing Unflows Capital Investing Inflows Capital Investing Inflows FIO SUB Credit Assessment (Millions) Revenue Operating Expenditure EIITDA	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (11,906) 3,910 (1,831) (11,906) 7,996 39,979 39,979 20,22 - 9,51 10,71	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) (2,064) (2,064) (14,732) 9,119 9,119 9,119 21,000 9,77 11,23	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) (2,352) (16,031) (2,352) (16,031) (2,352) (16,014) 10,348 51,858 22,89 - 10.05 12,83 - 10.05 - 12,85 - 1	59,834 139,621 (10,288) 480 (14,535) 6,811 (2,665) (2,665) (14,535) (2,665) (14,535) (2,665) (14,535) 11,724 58,669 24,84 - 10,31 14,53	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) (20,480) 10,559) (3,003) (20,480) 13,217 65,932 26,95 - 10,58 16,37 - 10,58	65,330 158,775 28,534 (10,660) 480 (2,2,479) 7,886 (3,361) (2,2,479) 7,886 (3,361) (2,2,479) 7,8618 73,618 73,618	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) (3,741) (24,512) 16,309 81,820 81,820 31,41 - 11,21 20,21	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 0 33,743 (11,537) (4,140) (26,573) 18,065 90,328 90,328 33.95 - 11.57 22,38	78,586 203,238 35,528 (11,918) 480 (28,622) 8,847 (4,555) (28,682) 19,835 99,175 36,525 11,95 36,52 - 11,95 24,57	85,530 222,495 38,511 (12,334) 480 (30,842) 9,173 (30,842) 9,173 (4,987) (4,987) (12,334) (12	85390 222,495 278,206 (107)321 4,761 (215,356) 77,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Investing fulfows Investing fulfows Financing fillows Financing fulfows Financing	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) (4,11 (11,906) 3,910 (1,831) 0 18,557 (8,730) (1,831) (1,906) 7,996 39,979 20,22 - 9,51 10,71 - 1,83	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) (14,732) 9,119 9,119 45,592 21,00 9,77 11,23 2,06	55,074 128,236 22,251 (10,031) 400 (16,614) (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858 22,89 2.2,99 2.2,89 2.2,89 2.2,89 2.2,99 2.2,89 2.2,99 2.2,89 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,99 2.2,89 2.2,99 2.2,89 2.2,99	59,834 139,621 24,197 (10,288) 6,811 (2,665) 0 24,677 (10,288) (2,665) (18,535) 0 24,677 (10,288) (2,665) 11,724 58,669 24,84 - 10,31 14,53 - 2,66	65,482 158,415 26,300 (10,559) 7,263 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932 26,95 - 10,58 16,37 - 3,00	65,330 158,775 28,534 (10,860) 4800 (22,479) 7,686 (3,361) (22,479) 7,686 (3,361) (22,479) 14,793 73,618 29,014 (10,860) (3,361) 29,004 14,793 73,618	71,530 179,255 179,255 111,82) (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (3,741) (24,512) 16,309 81,820 81,	78,291 196,794 33,263 (11,537) (4,140) (26,573) 8,507 (4,140) (26,573) 33,743 (11,537) (4,140) (26,573) 18,065 90,328 90,328 - 11,57 22,38 - 4,14	78,586 203,238 35,828 (11,918) (28,582) (28,582) (4,555) 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175 36,52 	85,930 222,495	85,300 222,495 278,206 (107,192) 4,761 (215,356) 77,279 (32,698)
Water SUM Cash flows Operating Inflows Operating Unflows Operating Unflows Investing Unflows Investing Unflows Financing Unflows Financing Unflows Capital Investing Inflows Capital Investing Inflows Capital Investing Inflows Capital Investment FF0 (5) Total Debt Credit Assessment (Millions) Revenue Operating Expenditure EIITDA Interest expense Development Contributions	22.261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (1,906) 3,910 (1,831) 0 18,557 (8,730) (1,831) (1,906) 7,996 39,979 39,979 20.22 - 9,51 10,71 - 1,83 0,48	55,316 123,617 20,455 (9,752) 480 (14,732) 5,614 (2,064) (14,732) 20,935 (9,752) (2,064) (14,732) 9,119 9,119 21,00 9,77 11,23 2,06 0,48	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858 22,89 - 10.05 12,858 - 10.05 12,858 - 10.05 - 2,35 - 0.05 -	59,834 139,621 (10,288) 480 (18,235) 6,811 (2,665) (18,535) 11,724 58,669 58,669 24,84 - 10,31 14,533 - 2,66 0,48	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) (20,480) 13,217 65,932 26,95 - 10,58 16,37 - 3,300 0,488 - 4,498 - 4,49	65,330 158,775 28,534 (10,860) 480 (22,479) 7,886 (3,361) (3,361) (22,479) 14,793 73,618 73,618 29,20 - 10,88 18,31 - 3,36 0,48	71,530 179,255 179,255 30,752 (11,182) 480 (24,512) 31,232 (11,182) (3,741) (24,512) 16,309 81,820 81,820 31,41 - 11,21 20,21 - 3,74 - 0,48	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) (26,573) 18,065 90,328 90,328 33,95 - 11,57 22,38 - 4,14 0,48	78,586 203,238 203,238 35,828 (11,918) 4800 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175 36,52 - 11,95 24,57 - 4,55 0,48	85,930 222,495	85,930 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating Outflows Investing Outflows Investing Outflows Financing inflows Financing inflows Financing fulfows Check FFO Operational and Investing Inflows Investing Outflows Capital Investing FFO (5) Total Debt Credit Assessment (Millions) Revenue Operating Expenditure EBITDA Interest expense Development Contributions Development Contributions Development Contributions EVENTE	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 4,011 (11,906) 3,910 (1,831) 0 18,557 (8,730) (1,831) (1,906) 7,996 39,979 39,979 20.22 - 9,51 10,71 - 1,83 0,48 8,000	55,316 123,617 20,455 (9,752) 480 (14,732) 5,514 (2,064) (14,732) (2,064) (14,732) (2,064) (14,732) (2,064) (14,732) 20,935 (2,064) (14,732) 21,00 9,719 21,00 9,777 11,23 2,065 0,48 9,112	55,074 128,236 22,251 (10,031) 4800 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858 22,89 10,05 12,283 0,48 10,35	59,834 139,621 24,197 (10,288) 4800 (18,535) 6811 (2,665) 0 24,677 (10,288) (2,665) (18,535) (18,535) (18,535) 11,724 58,669 24,84 - 10,31 14,53 - 2,66 0,48 11,72	65,482 158,415 26,300 (10,559) 7,265 (20,480) 7,265 (20,480) 7,265 (20,480) 7,265 (20,480) 7,265 (3,003) 0 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559) 26,780 (10,559)	65,330 158,775 28,534 (10,860) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,479) 7,3618 7,3618 7,3618 7,3618 7,3618 14,79 3,366 0,48 14,79	71,530 179,255 179,255 30,752 (11,182) 8,200 (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (24,512) 16,309 81,820 81,820 81,820 1,212 1	78,291 196,794 33,263 (11,537) (14,537) (14,537) (26,573) (26,573) (4,140) 0 33,743 (11,537) (4,140) (26,573) 18,065 90,328 90,328 - 11,57 22,38 - 11,57 22,38 - 11,57	78,586 203,238 203,238 35,828 (11,918) 4800 (28,682) (28,682) 0 36,308 (11,918) (4,555) (28,682) 19,835 99,175 36,52 - 11,95 24,57 - 4,555 0,48 19,835	85,930 222,495	85,300 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Cash flows Operating Inflows Operating Unflows Operating Unflows Investing Unflows Investing Unflows Investing Conflows Francing Unflows Contex FFO Operational and Investing Inflows Investing Unflows Capital Investment FFO (S) Total Debt Credit Assessment (Millions) Revenue Operating Expenditure EUTDA Interest segense Development Contributions Frund Entry Control Segment FFO (Control Segment Control Segment EUTDA Interest segense Development Control Segment FFO (Control Segment Eutor Control Segment FFO (Control Segment FFO Capital Expenditure EUTDA Interest segense Development Control Segment FFO Capital Expenditure EUTDA Interest Segense Development Control Segment FFO Capital Expenditure EUTDA Find Entry EUTOA Find Find Find Find Find Find Find Find	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (1,906) 3,910 (1,831) 0 18,557 (8,730) (1,831) (1,906) 7,996 7,996 20,22 - 9,51 10,71 - 1,83 0,48 8,00 11,91 - 1,83 - 0,48 8,00 11,91 - 1,83 - 0,48 - 0,557 - 1,837 - 1,957 - 1,837 - 1,947 - 1,947	55,316 123,477 20,455 (9,722) 480 (14,722) 2,044 (14,722) 2,044 (14,722) 2,054 (14,722) 2,100 9,119,11	55,074 128,236 22,251 (10,031) 4800 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858 22,89 - 10.05 12,858 - 22,89 - 10.05 12,858 - 23,55 - 23,55 - 23,55 - 24,55 -	59,834 139,621 24,197 (10,288) 480 0 (18,535) 6,811 (2,665) (18,535) (24,677 (10,288) (2,665) (18,535) (18,535) 11,724 11,724 24,84 - 10,31 14,533 - 2,666 0,048 - 24,84 - 10,31 14,533 - 2,666 - 0,488 - 24,84 - 10,31 - 14,555 - 24,84 - 10,31 - 14,555 - 24,84 - 10,31 - 24,84 - 10,31 - 24,84 - 10,31 - 24,84 - 10,31 - 24,857 - 24,957 - 2,957 - 2,	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 7,263 (3,003) 0 26,780 (3,003) (3,000) (3,0	65,330 158,775 28,534 (10,860) 4800 (22,479) 7,686 (3,361) 29,014 (10,860) (3,361) (2,479) 14,793 73,618 73,618 18,311 - 3,36 0,488 18,311 - 3,36 0,488 18,311 - 3,36 0,488 14,793 - 29,20 - 10,883 18,311 - 3,36 0,488 - 29,20 - 10,861 - 3,361 - 3,365 - 3,365	71,530 179,255 179,255 179,255 179,255 180,752 (11,182) 480 (24,512) 8,203 (3,741) (3,741) (24,512) 16,309 81,820 81,820 31.41 - 11.21 20,21 - 3,74 0,48 81,631 24,551	78,291 196,794 33,263 (11,537) 4800 (26,573) 8,507 (4,140) 0 33,743 (11,537) (4,140) (4,140) (26,573) 18,065 90,328 - 33.95 - 11.57 22,38 - 4,14 0,41 18,07 26,57 - 26,57 - 26,57 - 26,57 - 26,57 - 26,57 - 26,57 - 22,57 - 25,57 - 25,57	78,586 203,238 203,238 35,828 (11,918) 4800 (28,682) 8,847 (4,555) 0 36,308 (11,918) (4,555) (28,682) 99,175 99,175 36,52 - 11,95 24,57 - 4,55 0,48 19,83 24,57 - 4,55 0,48 19,83 24,57	85,930 222,495	85,300 222,495 278,206 (107,192) 4,761 (215,356) 77,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating Outflows Investing fulfows Investing fulfows Financing fulfows Financing fulfows Check FFO Operational and Investing Inflows Investing Outflows Check FFO Capital Investing Inflows Investing Outflows Credit Assessment (Millions) Revenue Operating Expenditure EBITOA Interest egenes Development Contributions EATCA Interest egenes Development Contributions Expenditure EATCA Interest egenes Development Contributions Expenditure FFO (C) Capital Expenditure EATCA Interest egenes Development Contributions Expenditure FFO (C) Capital Expenditure Expendit	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,898 18,116 (8,730) 441 (1,906) 3,910 (1,831) 0 18,573 (8,730) (1,831) 0 7,996 39,979 30,074	53,316 123,417 20,455 (9,752) 480 (9,752) 5,514 (14,721) 2,0645 (9,752) 2,00552 (2,064) (14,722) 2,00552 (2,064) (14,722) 2,005 9,119 9,119 9,119 9,119 9,119 9,119 2,100 9,777 11,133 2,066 9,777 11,233 2,066 9,777 11,235 2,066 9,777 11,235 2,066 9,777 11,235 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,067 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,067 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,066 9,772 2,067 2,072	55,074 128,236 22,251 (10,031) 480 (16,614) 6,266 (2,352) 0 22,731 (10,031) (2,352) (16,614) 10,348 51,858 22,89 - 10.05 12,835 0,48 10.35 0,48 10.35 16,61 - 6,27 - 7,27 - 7	59,834 139,621 24,197 (10,288) 480 480 480 480 480 480 480 480 480 480	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (3,003) (2,480) 13,217 65,932 26,952 - 10,58 16,37 - 3,000 0,48 13,227 20,48 - 3,200 - 4,595 - 10,58 - 10,58	65,330 158,775 28,534 (10,860) 480 (22,479) 7,686 (3,361) 0 29,014 (10,860) (3,361) (22,479) 14,793 73,618 73,618 18,31 - 3,360 0,48 18,31 - 3,360 0,48 14,79 22,248 - 7,69	71,530 179,255 30,752 (11,182) 480 (24,512) 8,203 (3,741) 0 31,232 (11,182) (3,741) (24,512) (3,741) (24,512) 16,309 81,820 81,820 81,820	78,291 196,794 33,263 (11,537) 480 (26,573) 8,507 (4,140) 0 0 33,743 (11,537) (4,140) 0 0 33,743 (14,537) 18,065 90,328 90,428 90,	78,586 203,238 203,	85,930 222,495 222,495	85390 222,495 278,206 (107,192) 4,761 (215,356) 72,279 (32,698)
Water SUM Sold Coperating Inflows Operating Inflows Operating Unflows Investing Unflows Investing Unflows Investing Outflows Pranacing Outflows Pranacing Outflows Coperation and Investing Inflows Investing Outflows Capital Investment FF0 Coperation and Investing Inflows Capital Investment FF0 (S) Total Debt Credit Assessment (Millions) Revenue Operating Expenditure EITDA Interest expense Development Contributions Frund From Operations (FF0) Capital Spenditure FF0 (C) Dett	22.261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,595 18,116 (8,730) (1,831) 0 18,573 (1,831) 18,573 (1,831) 18,573 (1,831) 18,573 (1,831) 18,573 (1,831) 18,573 (1,831) 18,573 (1,831) 18,575 (1,831) 18,575 (1,831) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 18,575 (1,936) 19,575 (1,9	53,316 123,647 20,455 (9,752) 20,455 (9,752) 20,450 (14,722) 20,957 (2,064) (14,722) 20,957 (2,064) (14,723) 20,66 (9,752) (2,064) (14,723) 20,66 (9,752) (2,064) (14,723) 20,655 (2,064) (14,723) (2,064) (2,	55,074 128,236 128,236 22,251 (10,031) 480 (16,546 5,266 5,266 (2,352)	59,834 139,621 24,197 10,288 480 0 0 24,197 0 24,197 0 24,197 0 24,197 0 24,197 10,288 480 0 24,197 0 24,555 10,248	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 7,263 10,559 (3,003) (20,480) 7,263 5,952 - 10,589 16,377 - 3,000 0,484 - 7,26 65,932 - 7,26 - 65,932 - 7,26 - 65,932 - 7,26 - 65,952 - 7,26 - 7,27 - 7,26 - 7,26 - 7,26 - 7,26 - 7,27 - 7,27 - 7,26 - 7,27 - 7,2	6,5,30,30 158,775 28,534 (1),860) 480 480 480 480 480 480 480 480 480 480	71,530 179,255 30,752 (1,1,82) 480 (2,512) 3,233 (3,741) 0 31,232 (3,741) 0 31,232 (3,741) (2,	78,291 196,794 33,263 (1,537) 480 (2,573) 480 (2,440) 0 (4,440) (2,573) 48,07 (4,440) (2,573) 18,065 90,328 90,328 18,057 90,328 18,057 11,557 18,057 18	78,586 203,238	85,930 222,495	85,300 222,495 278,206 (107,192) 4,761 (215,356) 77,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating fulfows Investing fulfows Investing fulfows Financing inflows Financing inflows Financing fulfows Check FIO Operational and Investing Inflows Investing Outflows Credit Assessment (Millions) Revenue Operating Expenditure EarTOA Interest operations Development Contributions Development Contributions Development Contributions Development Contributions Development Contributions Fire operating Cash flow (FOC) Debt	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,1084 113,898 18,116 (8,730) 441 (1,966) 7,956 7,956 10,572 10,772 10,7	53,316 123,617 20,455 (9,752) 480 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,5,074 128,236 22,251 (10,031) 480 0 (16,614) 51,656 51,656 22,897 10,348 10,348 51,656 12,832 10,558 12,859 12,859 10,558 12,859	59,834 139,621 24,197 (10,288) 480 (15,535) 0 24,677 (10,288) 480 (15,535) 0 24,677 (10,288) (15,535) 11,724 58,669 24,864 58,669	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932 26,955 - 10,588 16,37 - 3,300 0,488 13,227 - 3,300 0,488 13,227 - 3,300 0,488 - 3,207 - 3,200 - 3,207 - 3,207	6,530 158,775 28,534 (10,860) 489 7,685 (3,361) 7,685 (3,361) 7,685 (3,361) 7,685 (3,361) 7,685 (3,361) 7,685 (3,361) 7,685 7,785 7,795 7,	71,530 179,255 30,752 (1,1,82) 4890 (2,4512) 4890 (2,4512) 4890 (2,4512) 4890 (2,4512) 4890 (2,4512) 4890 (2,4512) (1,1,182) (1,1,182) (2,4512) (2,	78,291 196,794 33,265 (1,1537) 480 (2,5573) 480 (2,5573) 18,065 90,328 90,328 90,328 90,328 90,328 90,328	78,586 208,282 208,292	85,930 222,495 222,495	85,900 222,495 278,206 (107,192) 4,761 (215,366) 72,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating Outflows Investing fulfows Investing fulfows Financing fulfows Financing fulfows Financing fulfows Financing fulfows Check FFO Operation a diversing inflows Total Debt Credit Assessment (Millions) Revenue Operating Expenditure EatTDA Interest expense Development Contributions Fea operating Expenditure Fea operatin	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	51,084 113,095 113,195 113,195 113,195 113,195 114,116 11,195 10,191	53,316 123,617 20,455 (9,722) 480 (4,722) 20,952 (2,644) (4,722) 20,9752) (2,644) 9 0 0 0 0 123,617 123,617 123,617 124,722 124,723 124,722 124,722 124,723 124,722 124	5,5074 128,236 128,236 22,251 (10,031) 480 0 0 0 0 0 0 10,542 (10,542) (1	59,834 139,621 24,157 (10,288) 480 (14,535) 24,565 0 0 0 24,577 (10,288) (14,535) (14,535) (14,535) 11,724 24,545 (14,535) 24,545 (14,535) (14,535	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 7,263 (3,003) (20,480) 7,265 10,559 10,558 10	6,5,30 158,775 28,534 (1),8600 480 480 480 480 480 480 480 4	71,530 179,255 30,752 (11,152) 480 (24,512) (2,4	78,291 196,794 33,268 33,268 480 (1,537) 480 0 0 (4,140) 0 0 33,743 8,507 (4,140) 0 0 33,743 8,507 (4,140) 0 0 33,745 8,507 (4,140) 0 0 0 0 0 0 0 0 0 0 0 0 0	78,58,68 203,238 203,238 203,238 203,238 480 2(26,622) 2	85,930 222,495	85,900 222,495 278,206 (107,122) 4,761 (215,356) 7,2,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating Outflows Investing fulfows Investing fulfows Financing inflows Financing inflows Financing inflows Check FO Coheck Coheck FO Coheck	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,1084 113,898 113,898 18,116 (8,730) 441 41 (1,966) 7,996 7,996 7,996 20,222 9,511 10,711 10	53,316 123,617 20,455 (0,752) 480 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,5,074 128,236 22,251 (1,0,011) 480 480 (1,6,614) (2,2,781 (1,0,011) (1,6,614)	39,834 139,621 24,157 (10,288) 480 480 (15,555) 0 24,677 (10,288) (15,555) 0 24,677 (10,288) (15,555) 11,724 11,724 11,724 11,724 11,724 11,724 11,555 11,724 11,555 11,724 11,555 11,724 11,555 11,724 11,555 11,724 11,74	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932 26,955 - 10,58 - 10,58 - 10,58 - 10,58 - 3,000 0 0 - 4,000 - 4,000 - 2,6,952 - 10,58 - 10,58 - 10,58 - 10,58 - 10,58 - 10,589 - 10,589	65,330 158,775 28,534 (10,860) 480 480 480 480 480 480 480 480	71,530 179,255 30,752 (1,1,42) (1,1,42) (2,512) (2,512) (3,741) (1,1,42) (1,1,42) (2,512) (3,741) (3,741) (3,741) (3,741) (3,741) (3,742) (78,291 196,794 33,265 (1,537) 480 (2,5573) 480 (1,557) 480 (1,557) 480 (1,557) 480 (1,557) 18,065 90,228 90,28	78,586 208,288 208,288 208,288 208,288 208,288 208,288 208,288 208,288 200,298 200,200,200,200,200,200,200,200,200,200	85,930 222,495 222,495 38,511 (1,334) 4800 (30,642) 9,173 (4,987) 0 0 0 0 38,991 (12,334) (4,987) (30,842) 21,669 106,348 106,348 39,21 - 12,37 26,644 - 30,24 - 12,37 - 108,348 - 30,21 - 12,37 - 108,348 - 30,21 - 108,35 - 30,21 - 108,35 - 108,55 - 108,	8:590 222.495 275,206 (107.192) 4,761 (215,356) 72,279 (32.698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating Outflows Investing fulfows Investing fulfows Financing fulfows Credit Assessment (Millions) Revenue Operating Expenditure EBITDA Interest expense Development Contributions Fire operating fusentions Five operating Cash flow (FOCF) Debt Core Ratios Fivo / Debt (%) Debt (openue generates	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,1084 113,898 113,898 113,898 113,898 113,898 113,898 113,898 113,898 113,898 113,898 114,819 114,919 114,	55,316 123,617 20,455 (9,722) 480 (14,722) 20,957 (2,064) 400 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,074 128,236 22,251 (10,031) 480 (16,614) (16,61	59,834 139,621 24,157 (10,288) 480 (16,533) (16,553) (16,	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 10,589 (3,003) (20,480) 13,217 65,932 26,95 - 10,588 16,37 - 3,000 - 3,003 - 10,589 - 26,95 - 10,588 16,37 - 3,000 - 3,003 - 2,006 - 6,593 - 2,006 - 6,593 - 2,006 - 6,593 - 2,006 - 2,006 - 2,006 - 2,006 - 2,006 - 2,006 - 2,007 - 2,007 - 2,006 - 2,006 - 2,007 -	6,5,30 158,775 28,534 (1),860) 480 480 480 480 480 480 480 480	71,530 179,255 30,752 480 (2,5512) 480 (2,512) (2,741) 0 0 31,232 (2,741) (2,7	78,291 196,794 33,265 480 (6,140) 0 0 0 0 0 0 0 0 0 0 0 0 0	78,586 203,238 203,238 203,238 203,238 203,238 203,238 200,00 203,238	85,930 222,495	85,300 222,495 178,206 (107,192) 4,761 (215,356) 7,2,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating fulfows Operating fulfows Investing fulfows Investing fulfows Francing fulfows Francing fulfows Check FO Operating Outflows Check FO Cash flows Investing fulfows Investing I	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,1084 113,898 18,116 (8,730) 441 41 (1,966) 9,070 (8,730) 0 (8,730) 0 (8,730) 0 (1,431) (1,43	53,316 123,617 20,455 (9,752) 480 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5,074 128,236 128,236 128,236 128,236 128,236 122,251 1480 1480 16,646 16,526 6,256 6,256 6,256 10,053 10,053 10,053 10,054 10,046 10,346 1	9,8,84 139,621 139,621 14,197 (10,288) 480 480 480 480 480 480 480 480	65,482 158,415 26,300 (10,559) 4800 (20,480) 7,263 (3,003) 0 26,780 (20,480) 7,263 (3,003) (20,480) 10,559 (3,003) (20,480) 13,217 65,932 26,955 - 110,558 - 10,558 - 10,558 - 10,559 26,952 - 26,952 - 26,952 - 26,952 - 10,558 - 10,558 - 10,559 - 20,695 - 7,26 - 5,932 - 7,26 -	65,330 158,775 28,534 (1,680) 480 480 480 480 480 480 480 480	71,530 179,255 179,	78,291 196,794 33,265 (1,537) 480 (2,573) 480 (2,573) 18,065 90,228 90,28 90,2	78,586 208,288 208,288 208,288 208,288 208,288 208,288 208,288 208,288 209,175 20,078	85,930 222,495 222,495 222,495 38,511 (12,334) 4800 (30,642) 9,173 (4,987) 0 0 38,991 (12,334) (4,987) 0 0 21,669 106,348 106,348 106,348 21,669 106,348 21,679 30,842 21,669 106,348 21,679 30,842 21,669 20,669 21,669 20,642 21,669 20,642 21,669 20,642 21,669 21,669 21,669 21,669 20,642 21,669 21,669 21,669 20,642 21,669 20,642 21,669 20,642 21,669 21,669 20,642 21,669 20,642 21,669 20,642 21,669 20,642 20,642 21,669 20,642 20,642 20,642 20,642 21,669 20,642 20,64	8:390 222,495 278,206 (107.192) 4,761 (215,356) 7.2,279 (32,698)
Water SUM Cash flows Operating fulfows Operating fulfows Operating Outflows Investing fulfows Investing fulfows Financing fillows Financing fillows Financing fulfows Financing fulfows Financing fulfows Check FFO Operational and Investing Inflows Total Debt Credit Assessment (Millions) Revenue Operating Expenditure EBITDA Interest operations (FFO) Capital Expenditure EBITDA Interest one (FO) Capital Expenditure FFO (S) Core Ratios FFO (S) Core Ratios FFO (S) Debt (S) Debt (S) Debt (S) Debt (S) Debt (S) Debt (S)	22,261	47,168 100,926 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5:1084 113,898 113,898 113,898 113,898 113,898 113,898 113,898 113,898 114,115 114,	55,316 123,617 20,455 (9,752) 480 (14,722) 2,064 (14,722) 2,064 (14,722) 2,064 (14,722) 2,064 (14,722) 2,064 (14,722) 2,065 (14,725) 2,065 (14,755) 2,065 (1	5,5,074 128,236 22,251 (10,031) 480 (16,544) 6,266 6,268 (2,322) 0 0 22,731 (10,031) (10,031) (10,031) (10,034) 10,348 51,858 22,859 22,859 21,005 11,6541 20,005 21,558 21,558 20,005 21,558 20,005 21,558 20,005 21,558 20,005 21,558 20,005 21,558 20,005 21,558 21,558 20,005 21,558 21,55	59,834 139,621 139,621 139,621 14,157 (10,288) 480 (16,553) 0 0 24,677 (10,288) (16,553) 11,724 58,669 24,644 11,724 58,669 20,0% 4,0% 20,0% 21,855 21,957 21,9	65,482 158,415 26,300 (10,559) 480 (20,480) 7,263 (3,003) 0 26,780 (10,559) (3,003) (20,480) 13,217 65,932 26,559 10,588 16,37 -26,593 26,593 20,558 10,558 16,37 -3,000 0,48 13,217 65,932 20,48 -26,59 20,595 20,595	6,5,30 158,775 28,534 (1)8,800 480 480 480 480 480 480 480	71,530 179,253 30,752 (1,1,122) 480 (2,5,12) (2,4,512) (78,291 196,794 33,263 (1,537) 480 (2,5573) 18,065 90,328 90,328 90,328 11,577 18,065 90,328 90,328 90,328 11,577 22,857 90,328 11,577 22,857 90,328 11,577 12,2857 13,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 11,577 14,065 14,075 15,075 15,075 14,075 15,0	78,586 203,238	85,930 222,495 222,495	85,900 222,495 (107,192) 4,761 (215,356) 7,2,279 (32,698)



Tararua Single Council Water Services CCO/STABU

Summary sheet (\$000's)	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	Total
	Prior year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Demostic Connections	6 5 1 2	6 5 2 2	6 55 2	6 5 7 2	6 502	6 604	6 614	6 6 2 4	6 624	6 6 4 4	6.644	6 644	
Domestic connections	0,512	0,332	0,332	0,373	0,393	0,004	0,014	0,024	0,034	0,044	0,044	0,044	
Revenue													
Domestic Service Charges	12,209	-	12,209	12,209	12,209	12,209	12,209	12,209	12,209	12,209	12,209	12,209	134,299
Non-Domestic Service Charges		-		-	-	-				-	-	-	0
Water Infrastructure Contributions	254	-	305	305	305	305	305	305	305	305	305	305	3,302
Fees	393	-	472	472	472	472	472	472	472	472	472	472	5,109
Revenue Gap			10,598	9,882	10,908	12,148	13,496	15,233	17,033	18,682	20,246	21,705	149,931
Total Revenue	12,856		23.584	22,867	23,894	25.134	26.481	28,218	30.018	31.667	33,231	34,691	292.641
										,		.,	
													CAGR
Total Revenue % change			83.4%	-3.0%	4.5%	5.2%	5.4%	6.6%	6.4%	5.5%	4.9%	4.4%	10.4%
Total Revenue per cap % change			82.9%	-3.3%	4.2%	5.0%	5.2%	6.4%	6.2%	5.3%	4.9%	4.4%	
Total Domestic Rev % Change			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Domestic Rev per cap % Change			-0.6%	-0.5%	-0.5%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	0.0%	0.0%	0.5%
Total Domestic and gap Rev per cap % change			80.0%	-3.4%	4.3%	5.276	3.4%	0.0%	0.4%	0.0%	5.1%	4.3%	9.5%
Opex		0	(8,885)	(9,092)	(9,321)	(9,537)	(9,834)	(10,167)	(10,512)	(10,865)	(11,214)	(11,572)	(101,000)
Total Expenses		0	(8,885)	(9,092)	(9,321)	(9,537)	(9,834)	(10,167)	(10,512)	(10,865)	(11,214)	(11,572)	(101,000)
EBITDA			14,699	13,775	14,572	15,597	16,648	18,051	19,506	20,802	22,017	23,118	178,785
EBITDA % of Revenue			62%	60%	61%	62%	63%	64%	65%	66%	66%	67%	
Description		10.000	10 005	10	10 000	In nor:		(* 84	10.00	10	10.00.	10	146.0
Depreciation		(3,025)	(3,025)	(3,448)	(3,660)	(3,900)	(4,442)	(4,738)	(5,063)	(5,742)	(6,104)	(6,471)	(49,618)
Interest		U	(2,038)	(2,078)	(2,793)	(2,953)	(3,15/)	(3,397)	(0,0/0)	(3,942)	(4,186)	(4,403)	(33,816)
NPAT		- 3,025	9,035	7,650	8,119	8,744	9,049	9,916	10,773	11,117	11,728	12,244	95.350
			,			., .							,
Capex													
Stormwater		0	(625)	(717)	(803)	(890)	(977)	(1,065)	(1,154)	(1,162)	(1,171)	(1,179)	(9,741)
Wastewater		0	(4,425)	(5,079)	(5,721)	(6,379)	(7,045)	(7,730)	(8,427)	(8,544)	(8,663)	(8,782)	(70,795)
Water CLIMA		0	(0,338)	(12 071)	(8,227)	(9,209)	(10,210)	(11,248)	(12,311)	(12,532)	(12,/58)	(12,988)	(103,096)
301	_	-	(11,500)	(13,071)	(14,750)	(10,477)	(10,232)	(20,043)	(21,031)	(22,233)	(22,331)	(22,545)	(185,052)
Network Value													
Wastewater		53,965	58,389	63,195	62,841	68,224	74,583	74,322	81,268	88,265	87,842	94,834	94,834
Stormwater		23,599	24,224	26,163	24,528	26,546	27,395	27,061	27,988	30,306	28,548	30,863	30,863
Water		76,918	83,257	90,057	89,591	97,223	106,309	105,914	115,859	125,768	125,213	135,120	135,120
SUM	-	154,482	165,870	179,415	176,960	191,993	208,287	207,298	225,115	244,339	241,603	260,817	260,817
Cash flows												•	
Operating Inflows		0	21 365	22 621	23 505	24 727	26,066	27 771	29.565	31 227	32 798	34,266	273.911
Operating Outflows		0	(8,155)	(9,075)	(9,303)	(9,519)	(9,809)	(10,140)	(10,484)	(10,836)	(11,186)	(11,543)	(100,049)
Investing Inflows		0	280	305	305	305	305	305	305	305	305	305	3,023
Investing Outflows		0	(10,452)	(12,933)	(14,612)	(16,335)	(18,087)	(19,894)	(21,739)	(22,210)	(22,562)	(22,920)	(181,746)
Financing Inflows		0	(401)	1,759	2,898	3,776	4,683	5,355	6,023	5,457	4,831	4,295	38,677
Financing Outflows		0	(2,638)	(2,678)	(2,793)	(2,953)	(3,157)	(3,397)	(3,670)	(3,942)	(4,186)	(4,403)	(33,816)
check		0	0	0	0	0	0	0	0	0	0	0	
Operational and Investing Inflows		0	21.645	22 926	23,800	25.022	26 370	28.076	29 870	31 5 2 2	33 103	34 571	
Investing Outflows		0	(8 155)	(9.075)	(0 303)	(9 510)	(9,800)	(10.140)	(10.484)	(10.836)	(11 186)	(11 542)	
Financing outflows		0	(2.638)	(2.678)	(2,793)	(2,953)	(3,003)	(3.397)	(3.670)	(3.942)	(4.186)	(4.403)	
Capital Investment		0	(10,452)	(12,933)	(14,612)	(16,335)	(18,087)	(19,894)	(21,739)	(22,210)	(22,562)	(22,920)	
			, .,,	(). Maj	, ,,	(1		. ,,	(, ===)			
FFO (\$)	_	-	10,852	11,174	11,714	12,560	13,404	14,539	15,716	16,753	17,731	18,624	
						60 AT-	68 A.C.				ee.ec.=		
Total Debt	43,342	55,244	54,844	56,603	59,501	63,277	67,960	73,315	79,338	84,795	89,627	93,922	
Credit Assessment (Millions)													
Revenue	Í.	-	23.58	22.87	23.89	25.13	26.48	28.22	30.02	31.67	33.23	34.69	
Operating Expenditure		-	8.88	9.09	9.32	- 9.54	- 9.83	- 10.17	- 10.51	- 10.87	- 11.21	- 11.57	
EBITDA		-	14.70	13.78	14.57	15.60	16.65	18.05	19.51	20.80	22.02	23.12	
Interest expense		-	2.64	2.68	- 2.79	- 2.95	- 3.16	- 3.40	- 3.67	- 3.94	- 4.19	- 4.40	
Development Contributions		-	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
Funds from operations (FFO)		-	10.85	11.17	11.71	12.56	13.40	14.54	15.72	16.75	17.73	18.62	
Capital Expenditure		-	10.45	12.93	14.61	16.34	18.09	19.89	21.74	22.21	22.56	22.92	
Deht			0.4U - 54.84	56.60	- 2.9U 59.50	- 3.78 63.28	- 4.08 67.96	- 5.3b 73.32	- 0.U2 79.34	- 5.46 84.80	- 4.63	- 4.30	
			54.04	50.00	55.50	05.20	07.30	, 3.32	, 5.34	04.00	05.03	55.52	
Core Ratios													
FFO / Debt (%)			19.8%	19.7%	19.7%	19.8%	19.7%	19.8%	19.8%	19.8%	19.8%	19.8%	
Debt / EBITDA (x)			3.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	
Debt to revenue percentage			233%	248%	249%	252%	257%	260%	264%	268%	270%	271%	
Supplementary coverage ratios													
FFU interest cover (x)			5.1	5.2	5.2	5.3	5.2	5.3	5.3	5.2	5.2	5.2	



Carterton Single Council Water Services CCO/STABU

Summary sheet (\$000's)	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	Total
	Prior year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Demostly Conceptions	2.445	2.405	2.400	2.505	2 5 2 7	2540	2554	2500	2.501	2.505	2.005	2.015	
Domestic connections	3,445	3,405	3,480	3,300	3,527	3,540	3,554	3,308	3,361	3,595	3,005	3,015	
Pavanua													
Domestic Service Charges	6 957		6 704	6 704	6 704	6 704	6 704	6 704	6 704	6 704	6 704	6 704	73 997
Non-Domestic Service Charges	-,		-	-	-	-	-	-	-	-	-	-	0
Water Infrastructure Contributions	249		299	299	299	299	299	299	299	299	299	299	3,237
Fees	468	-	562	562	562	562	562	562	562	562	562	562	6,084
Revenue Gap	-	-	4,417	4,723	5,730	7,733	8,902	10,145	11,479	12,890	14,370	15,924	96,314
Total Revenue	7,674	-	11,982	12,287	13,295	15,297	16,466	17,710	19,043	20,454	21,934	23,489	179,632
													CAGR
Total Revenue % change			56.1%	2.6%	8.2%	15.1%	7.6%	7.6%	7.5%	7.4%	7.2%	7.1%	11.8%
Total Revenue per cap % change			55.2%	2.0%	7.6%	14.6%	7.2%	7.1%	7.1%	7.0%	6.9%	6.8%	
Total Demonia Devill Change			2.0%	0.0%	0.000	0.0%	0.000	0.00/	0.0%	0.00/	0.0%	0.00/	
Total Domestic Reviner can % Change			-3.0%	-0.6%	-0.6%	-0.4%	-0.4%	-0.4%	-0.4%	-0.4%	-0.3%	-0.3%	
Total Domestic and gan Rev per can % Change			58.0%	2.1%	8.2%	15.7%	7.7%	7.6%	7.5%	7.4%	7.2%	7.1%	10.8%
Total bomestic and gap new per cap to enange			50.070	2.2/0	0.270	13.770		7.070	1.370		1.2/0	7.270	10.075
Opex		0	(5.749)	(5.909)	(6.116)	(7.275)	(7.512)	(7.747)	(8.000)	(8.266)	(8.538)	(8.823)	(73.935)
Total Expenses		0	(5,749)	(5,909)	(6,116)	(7,275)	(7,512)	(7,747)	(8,000)	(8,266)	(8,538)	(8,823)	(73,935)
					ĺ								
EBITDA		-	6,233	6,379	7,179	8,022	8,954	9,962	11,043	12,189	13,396	14,666	98,023
EBITDA % of Revenue			52%	52%	54%	52%	54%	56%	58%	60%	61%	62%	
Depreciation		(941)	(941)	(1,132)	(1,262)	(1,409)	(1,675)	(1,857)	(2,057)	(2,405)	(2,643)	(2,902)	(19,223)
Interest		0	(1,136)	(1,255)	(1,408)	(1,581)	(1,773)	(1,982)	(2,207)	(2,446)	(2,699)	(2,966)	(19,452)
NDAT		0/7	4.455	2.007	4 500	F 0**	F F05	6 1 2 2	6 770	7 300	0.055	0.700	
BEAL		- 941	4,156	3,992	4,509	5,032	5,506	0,124	6,779	1,558	6,055	6,799	59,348
Capex													
Stormwater		0	(66)	(76)	(86)	(97)	(108)	(119)	(131)	(143)	(155)	(168)	(1.148)
Wastewater		0	(3.851)	(4.420)	(4.980)	(5.555)	(6.136)	(6.735)	(7.344)	(7.962)	(8,595)	(9.244)	(64.823)
Water		0	(3,162)	(3,629)	(4,115)	(4,618)	(5,134)	(5,671)	(6,223)	(6,790)	(7,378)	(7,988)	(54,708)
SUM		0	(7,079)	(8,126)	(9,181)	(10,270)	(11,378)	(12,524)	(13,698)	(14,895)	(16,128)	(17,400)	(120,679)
			-				÷				-	-	
Network Value													
Wastewater		16,584	20,435	22,270	24,974	27,313	32,959	33,333	39,492	43,635	47,011	51,680	51,680
Stormwater		11,100	11,167	12,080	11,055	11,978	12,048	11,886	11,966	12,981	11,894	12,920	12,920
Water	_	24,128	27,289	29,590	30,781	33,510	38,127	38,250	43,316	47,615	49,355	54,129	54,129
SOM		51,812	58,891	63,940	66,810	72,801	83,134	63,409	94,775	104,251	108,200	116,729	116,/29
Cash flows											·	•	
Operating Inflows		0	10 723	11 964	12 913	14.834	16.071	17 309	18 635	20.040	21 514	23.062	167.063
Operating Outflows		0	(5.277)	(5.895)	(6.099)	(7.180)	(7,493)	(7.728)	(7,979)	(8,244)	(8.515)	(8,799)	(73.210)
Investing Inflows		0	274	299	299	299	299	299	299	299	299	299	2,963
Investing Outflows		0	(6,497)	(8,040)	(9,095)	(10,180)	(11,287)	(12,430)	(13,601)	(14,796)	(16,027)	(17,296)	(119,248)
Financing Inflows		0	1,913	2,928	3,390	3,809	4,182	4,533	4,853	5,147	5,428	5,700	41,883
Financing Outflows		0	(1,136)	(1,255)	(1,408)	(1,581)	(1,773)	(1,982)	(2,207)	(2,446)	(2,699)	(2,966)	(19,452)
check		0	0	0	0	0	0	0	0	0	0	0	
HU Occurrent and transformer to flower			10.700	11.051	12.012	14.001	10.071	17.200	10.005	20.0.10	21.5.1	22.052	
Operational and Investing Inflows		0	10,723	11,964	12,913	14,834	16,071	17,309	18,635	20,040	21,514	23,062	
Financing outflows		0	(5,277)	(5,895)	(0,099)	(7,180)	(7,493)	(1,728)	(7,979)	(8,244)	(8,515)	(8,799)	
Capital Investment		0	(1,130)	(1,235)	(1,408) (0,005)	(10 180)	(11 287)	(12 420)	(13 601)	(1/1 70/21	(16 027)	(17 206)	
capital meatheric		0	(0,457)	(0,040)	(3,033)	(10,100)	(11,207)	(12,450)	(13,001)	(14,750)	(10,017)	(17,230)	
FFO (\$)	_	-	4,310	4,813	5,406	6,073	6,806	7,599	8,449	9,350	10,300	11,297	
Total Debt	14,943	22,660	24,573	27,501	30,891	34,699	38,881	43,414	48,267	53,415	58,843	64,543	
Credit Assessment (Millions)													
Revenue		-	11.98	12.29	13.29	15.30	16.47	17.71	19.04	20.45	21.93	23.49	
Operating Expenditure		-	- 5.75 -	- 5.91	- 6.12	7.28	- 7.51	7.75	- 8.00	- 8.27	- 8.54	- 8.82	
EBITDA		-	6.23	6.38	7.18	8.02	8.95	9.96	11.04	12.19	13.40	14.67	
Interest expense		-	- 1.14	- 1.26	- 1.41	- 1.58	- 1.77	1.98	- 2.21	- 2.45	- 2.70	- 2.97	
Event from approximations		-	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
Capital Expanditure		-	4.51	4.61	5.41	0.0/	0.61	12.00	0.45	9.35	10.30	17.30	
Eree operating cash flow (FOCE)			0.5U 2 10	a.u4 3.23	- 3,60	4.11	- 4.48	12.43	- 5.15	- 5,45	- 5.73	- 6.00	
Debt			2.19	27 50	30.89	34.70	38.88	43.03	48.27	53.41	58.84	64 54	
			1.4.37	27.30	50.03	54.70	50.00		-0.27	55.41	50.04	U-1.34	
Core Ratios													
FFO / Debt (%)			17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	
Debt / EBITDA (x)			3.9	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.4	
Debt to revenue percentage			205%	224%	232%	227%	236%	245%	253%	261%	268%	275%	
Supplementary coverage ratios													
FFO interest cover (x)			4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	



Multi Council Water Services CCO

Summary sheet (\$000's)	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
Domestic Connections	23,729	23,842	23,954	24,026	24,097	24,169	24,240	24,312	24,353	24,394	
Deveenue											
Domestic Service Charges	42.365	42 365	42.365	42.365	42 365	42.365	42.365	42.365	42.365	42.365	466.266
Non-Domestic Service Charges	-	-	-	-	-	-	-	-	-	-	400,200
Water Infrastructure Contributions	3,826	3.826	3.826	3.826	3.826	3.826	3.826	3.826	3.826	3,826	41 444
Fees	2,771	2.771	2.771	2,771	2.771	2,771	2.771	2,771	2,771	2,771	30.023
Revenue Gap	4,703	9,347	14,480	20,006	26,059	32,692	39,959	48,005	56,711	66,256	318,219
Total Revenue	53,665	58,309	63,442	68,967	75,021	81,654	88,921	96,967	105,673	115,218	855,952
											CAGR
Total Revenue % change	11.5%	8.7%	8.8%	8.7%	8.8%	8.8%	8.9%	9.0%	9.0%	9.0%	9.1%
Total Revenue per cap % change	11.0%	8.1%	8.3%	8.4%	8.5%	8.5%	8.6%	8.7%	8.8%	8.8%	
Table and the second second	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.000	
Total Domestic Rev % Change	-0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Domestic Rev per cap % Change	-1.5%	-0.5%	-0.5%	-0.3%	-0.3%	-0.3%	-0.5%	-0.3%	-0.2%	-0.2%	0.49/
Total Domestic and gap Kev per cap % change	9.476	9.4%	9.4%	9.470	9.4%	9.470	9.4%	9.3%	9.3%	9.476	9.476
Opex	(29,817)	(30,500)	(31,200)	(33,831)	(34,143)	(34,496)	(34,822)	(35,197)	(35,522)	(35,859)	(335,387)
Total Expenses	(29,817)	(30,500)	(31,200)	(33,831)	(34,143)	(34,496)	(34,822)	(35,197)	(35,522)	(35,859)	(335,387)
EBITDA	23,847	27,810	32,242	35,136	40,879	47,158	54,099	61,770	70,151	79,359	472,450
Corrow to revenue	44%	48%	51%	51%	54%	58%	01%	04%	00%	09%	
Depreciation	(10,754)	(12,247)	(13,011)	(13,874)	(15,776)	(16,805)	(17,915)	(20,222)	(21,466)	(22,762)	(175,586)
Interest	(8,710)	(10,014)	(11,492)	(13,127)	(14,883)	(16,677)	(18,476)	(20,206)	(21,792)	(23,190)	(158,568)
NPAT	4,383	5,549	7,739	8,136	10,220	13,676	17,708	21,341	26,893	33,406	138,297
Capex		()	(* ****)	(* ** *)	()	(* * * * * *	(* ****)	(* * * * *	(1.1.88)	((
Stormwater	(2,149)	(2,455)	(2,770)	(3,034)	(3,289)	(3,541)	(3,785)	(3,948)	(4,107)	(4,259)	(33,336)
Wastewater	(15,606)	(17,824)	(20,111)	(22,068)	(23,974)	(25,863)	(27,706)	(28,969)	(30,202)	(31,402)	(243,725)
water	(23,384)	(26,707)	(30,134)	(33,073)	(35,936)	(38,///)	(41,549)	(43,453)	(45,315)	(47,128)	(365,457)
300	(41,140)	(40,380)	-	(38,173)	-	-	(73,040)	-	(73,023)	-	(042,518)
Network Value											
Wastewater	250,950	2/1,290	265,606	287,615	309,468	306,702	330,027	358,090	351,839	380,670	380,670
Stormwater	105,168	113,6/1	105,901	114,641	217,486	215,949	119,004	128,969	120,650	130,727	130,727
vvater Clina	230,300	237,965	203,003	204,991	317,002	313,972	330,910	360,914	365,009	410,002	410,002
SOM	594,508	042,940	034,510	087,247	744,010	/36,023	799,941	607,972	656,096	928,000	928,000
Cash flows											
Operating Inflows	45,743	54,102	59,195	64,688	70,698	77,283	84,498	92,480	101,132	110,608	760,426
Operating Outflows	(27,367)	(30,444)	(31,143)	(33,615)	(34,117)	(34,467)	(34,795)	(35,166)	(35,496)	(35,831)	(332,440)
Investing Inflows	3,511	3,826	3,826	3,826	3,826	3,826	3,826	3,826	3,826	3,826	37,942
Investing Outflows	(37,759)	(46,505)	(52,520)	(57,751)	(62,786)	(67,771)	(72,641)	(76,097)	(79,356)	(82,530)	(635,714)
Financing Inflows	24,582	29,035	32,134	35,979	37,262	37,807	37,589	35,163	31,686	27,118	328,354
Financing Outflows	(8,710)	(10,014)	(11,492)	(13,127)	(14,883)	(16,677)	(18,476)	(20,206)	(21,792)	(23,190)	(158,568)
спеск	U	U	U	U	U	U	U	U	U	U	
FFO											
Operational and Investing Inflows	49 254	57 927	63.020	68 51 3	74 524	81.109	88 374	96 305	104.957	114.433	
Investing Outflows	(27 367)	(30,444)	(31.143)	(33,615)	(34,117)	(34.467)	(34,795)	(35,166)	(35.496)	(35.831)	
Financing outflows	(8,710)	(10.014)	(11.492)	(13,127)	(14,883)	(16.677)	(18,476)	(20,206)	(21,792)	(23.190)	
Capital Investment	(37,759)	(46,505)	(52,520)	(57,751)	(62,786)	(67,771)	(72,641)	(76,097)	(79,356)	(82,530)	
rro (ĉ)	12.177	17 470	20.290	21 772	25 524	20.064	25.052	40.022	47 (70	FF 412	
FFO (3)	13,177	17,470	20,386	21,//2	23,324	29,964	35,052	40,933	47,870	55,412	
Total Debt	192,952	221,987	254,121	290,100	327,361	365,168	402,757	437,920	469,606	496,724	
LORE RATIOS	6.030	7 87%	8.02%	7 51%	7 80%	8 21%	8 70%	0.35%	10 15%	11 16%	
Debt / EBITDA (x)	8.1	7.67%	7.9	8.3	8.0	7.7	7.4	7.1	6.7	6.3	
Supplementary coverage ratios	0.1	3.0	1.5	0.5	3.0	1.1	7.4	7.1	5.7	0.0	
FEQ / cash interest (x)	15	17	1.8	17	17	1.8	1.9	2.0	2.2	2.4	
EBITDA / interest (x)	2.7	2.8	2.8	2.7	2.7	2.8	2.9	3.1	3.2	3.4	
Supplementary payback ratios											
CFO / debt (%)	6.8%	7.9%	8.0%	7.5%	7.8%	8.2%	8.7%	9.3%	10.2%	11.2%	
FOCF / debt (%)	-14.5%	-13.3%	-12.8%	-12.5%	-11.5%	-10.5%	-9.4%	-8.1%	-6.8%	-5.5%	
Estimated Credit Patings											
Standalone Credit Rating	BBB	BBB	BBB	BBB	BBB	RRR	RRR	BBB	BBB	RRR+	



12. Council AMPs - Project by Project

This section Displays the composition of the AMP Project by Project Masterton District Council (Actual Dollars, Real)

Project / Programme Name		Driver	Total, 10 years
Stormwater renewal & upgrade	Maintenance and renewal work is required to ensure current leve	Level of Service	7,092,600
Stopbank - associated pipe work upgrade	Improve flood protection works for protecting our assets	Level of Service	2,203,000
Stornwater consent	To comply with compliance requirements	Level of Service	167,700
Stormwater treatment	To improve the level of Service	Environmental	1,902,400
Urbanisation of Millard Avenue	Development of Millard Avenue	Level of Service	435,200
Improve flood protection	Improve flood protection works for protecting our assets	Level of Service	456,750
Stormwater Solution	Creation of SW system to relieve ground water issues in area.	Level of Service	5,000,000
Sewer reticulation renewals	Based on condition assessments from CCTV work, and Service req	Level of Service	22,642,000
Homebush plant & equipment renewals	Renewal of equipment i.e. pumps, scada upgrade, ventrac mower	Growth	1,149,400
Homebush plant & equipment renewal extension	Pipes extension for Homebush irrigation	Level of Service	2,520,000
Homebush consent renewal & plant upgrade	Homebush consent renewal & plant upgrade	Renewals	39,160,000
Urbanisation of Millard Avenue	Development of Millard Avenue (Sewer Extension)	Level of Service	1,414,400
Castlepoint sewerage plant renewals	Castlepoint sewerage plant renewals	Growth	192,130
Riversdale Beach scheme renewals	Riversdale Beach scheme renewals	Growth	354,630
WTP Consent Renewal - take	Consent year 2 but work start year 1	Renewals	115,400
WTP - plant & equipment renewals	WTP - plant & equipment renewals	Growth	1,392,940
WTP - building renewals	WTP - building renewals	Level of Service	266,420
Raw water storage dams	Raw water storage dams	Environmental	8,370,000
Reseal Access Road WTP	Reseal of the Access Road - WTP	Level of Service	17,625
WTP - plant & equipment upgrades	WTP - plant & equipment upgrades	Level of Service	920,320
Filter Refurbishment	Filter Refurbishment	Growth	602,000
Water mains renewals (reticulation)	Water mains renewals (reticulation)	Renewals	27,088,766
Water connections replacements	Water meters issues	Level of Service	904,250
Reservoir upgrades	This is now part of the 3 water projects	Environmental	7,910,000
Water meters project completion	Water meters project completion	Growth	200,000
Urbanisation of Millard Avenue	May be brought forward to year 1 see after delbrations	Level of Service	863,002
Water main - CBD	Reduced by renewals	Renewals	2,174,445
Wainuioru water supply renewals	Wainuioru water supply renewals	Growth	354,180
Tinui water supply upgrades	Tinui water supply upgrades	Level of Service	30,030
			135,899,588

South Wairarapa District Council (Actual Dollars, Real)

Activity	Project Name	Capital Category	Inflation Type	10 Year (Real)
Water Supply	Greytown WTP Upgrades Stage 3	Level of Service	Water, sewer, drainage, & waste	3,000,000
			2 : <i>1</i> :	
Water Supply	Renewals DW - Condition rated renewals	Renew	Pipelines	24,256,400
Water Supply	Annually Recurring Projects	Renew	Water, sewer, drainage, & waste	6,800,000
Water Supply	ESTN Water Main Renewals	Ropan	Pineliner	8 200 000
water Jupply	rom water Main Nenewals	Nerrew	ripenies	0,200,000
Water Supply	Waiohine WP Filtration	Renew	Water, sewer, drainage, & waste	1,150,000
Water Supply	Boar Bush PW Trunk Main	Renew	Pipelines	10,150,000
Water Supply	SWDC VHCA Reservoir Water Quality Renewals	Renew	Water, sewer, drainage, & waste	150,000
Stormwater	Annually Recurring Projects	Renew	Pipelines	1,950,000
Wastewater	Annually Recurring Projects	Renew	Pipelines	4,200,000
Wastewater	Renewals WW - Condition rated renewals	Renew	Pipelines	22,680,000
Wastewater	ESTN WWTP Consent renewal	Level of Service	Water sewer drainage & waste	16 800 000
Wastewater	FSTN Pressure Wastewater system - Stage 1	Level of Service	Water, sewer, drainage, & waste	7,400,000
	FSTN WWTP Long-term Consent Stage 2 and Major			
Wastewater	Plant Upgrade 2	Level of Service	Water, sewer, drainage, & waste	4,500,000
	MTB WWTP Compliance Upgrades - Stage 2a Land			
Wastewater	Irrigation	Level of Service	Water, sewer, drainage, & waste	26,400,000
	MTB WWTPCompliance Upgrades - Stage 2b Winter			
Wastewater	Storage	Level of Service	Water, sewer, drainage, & waste	15,500,000
Wastewater	WWIPH&S Fencing Upgrades	Level of Service	Other	-
	GTN WWTP Compliance Upgrades - Stage 2a Land			
Wastewater	Irrigation	Level of Service	Water, sewer, drainage, & waste	21,300,000
Wastewater	GTN Papawai Rd Wastewater Upgrade Stage 2	Grow	Water, sewer, drainage, & waste	3,500,000
			,,	177 936 400



Tararua Council (Actual Dollars, Real)

	Total
Maxiewiter	
arowin Dannesine wastewater networkdevelopment (extension) Exhibits Wastewater Network Development (extension)	991,00
Woodville Waxtewater Network Development (extension) Development and extension of Waxtewater Network	619,20 2,093,00
Total Capital Expanditure for Growth	3,972,200
Log DistactPlant - Awatans etc	329,00
Detectivatewater security systems. Wastewater Three Waten Generators & Emergency	168,00
Gudge Disposal Pahanua Danneärie Wastesater Teatment Plantüpgside (Syshon, pipes alt raute)	350,00
Donneärie land pachase Normescod Wate Water Testment PlantDesign	3,359,00
Normewood Wate Water Teatment Plant DVR Waste Water Treatment Plant Upgrade	788,00
Pahlatua Wedand Development Budge Disposal Fadility	554,00
Pahlatus Wetland Design Woodville Wetland Design	45,00
Woodwille Westand Resource Consent Pahlatua WW pipeline from plant to westand	20,00
Danneskie Land Intgation investigation SVK Land IntgationConcert	55,00
ND//Waxte Water Textment Plant Design ND//Waxte Water Textment Plant Upprade	114,00
Symonicale Wartwarter Discharge Resource Consent	330,00
Ormonialities waitional land purchases	67,00
Ormondville Wetland Development Sourcess Wetland Device	19,00
Fongena Wetani Land Punchase Nordelle Wetani Land Punchase	135,00
ionescod Wetland Land parchase	54,00
tornencos vertano restanos contene tornencos Wetano Design	56,00
konensood Wettend Lawelogment Rotohana Wastewater Treatment Plant Upgrade	238,00
Smonthille Wartworker Trivite ent Upgrate/Decign Smonthille Wartworker Trivite ent Upgrate	127,00
Pahlatua Wastewater Trivatment Plant Upgrade Pongesoa Treatment Plant Upgrade	2,300,00
Pongena Treats et Plant Design Drmondville Wetland Investigation	131,00
Pongunoa Wedand Dewelopment Pongunoa Wedand Consent	237,00
Pongacoa Wettand Investigation Woodville Pipeline to Wetland	27,00
fatal Capital Expenditure for LOS	27,100,000
Renewel Notic t Urgibarned Wastewater Reticulation Renewals	315.00
Woodville Pond 2 Liner Replacement 92 ADA - Wastewater	123,00
District Wide Nanhole Replacements. nitration and inflow Strategy implementation	470,00
Pump Station Remnants National Remnants	595,00
National TeleParimeter Safety Fending around pands.	300,00
fotal Capital Expenditure for Renewal	26,821,05
Forai Canital Evolutifica, Br Wartsneter	47.8.93.24
Antar Capital Reprint and the statements	31 21 24 24
Scouth	
Zannekirie Water Nietwark Development (externior) Det stware Water Nietwark Development (externior)	1,826,38
ionexpod Preusure Management for upper and lower network	15,00
Woodville Water Nithaork Development (vetwork) Dotal Cavinal Excenditions for Growth	2,027,25
05	10 44
laik Néme, 🔮 Senice receivers to townikish towns. Screened With Richards Distriction - courts downikish for History	125,00
Noch-life Atternate Water Source Resource Consent Induced MaterianStatics and Incidencettion	1,205,00
Concerts tankform - and of West (Inducing security's safety) and a 20/07 - a finite in a decision a stability at the	72,00
Janneskie Backwah Water Recurs Consent	50,00
kanakadan Linergi systemicity internationality are seen	1,266,00
Botahuna Baclavach Water Resource Consett Ibraeacod Badoaash Water Resource Consett	50,00
Fahlatus Backwach sater necouros consent Fahlatus Bone Re-Development	50,00
Pahlatus Dam and Divertion Convert Pahlatus Fronion Control Convert	25,00
Pohlatus Sediment Dischurge permit Dans Constauction/Water Permit	25,00
Wood-Me Backwash Water Resource Consent Jackfow Strategy and Devices	50,00
Renewood Aberrate water source VerdetWater Generalis General	250,00
District R universe Continuity - Generators or Ratvery Stones - D/Wide Descure Minoraet act - Recipion Values	103,00
Paticulation Water Lealoge Stategy	375,00
rus Indexe tutale Head Storage Iongona 3 Day Teaded Storage	500,00
Rotatura New Rose Resource Consent	40,00
iongaida Water NetworkUpgelde s.c.aurteniss tackflow valves.etc. iosal Capital Expenditure for LOS	75,00
terrevel	
vocazione securita tutta contante RCADA - Mator Notaria	40,00 547,00
annexere e promot supply annexite Fluoridition	5,400,00
canowarea intake flow meter Venics Plant	200,00
ketahuna Relevides explorement Mitradon Gallery eshabilmaintenance	825,00
len brane Replacement 10 yearly Shlatus Old Receivelir Remedials	300,00
lahistus Souice Water Concent lahistus WTP Rising Istain Reneval	40,00
Voodullie Rassen virs - East hyusie Assessment Reneval Surai hävin Line - Stage 2 - Reservoir 2 to Town	3,270,00
inglanned Ramenals - Reficulation Set & Water Ganaral Ramenals - Healthouse Calas-	315,00
Senter Water Rational Francisco - Provinciano Santoy Senter Water Rational Indonesia Baranala	187,00 34,485,81
ahistus Water Tale Bore Resource Consent	00,062 00,628
ongeica water bio Resource Consent bibitua Weir & Inflitation Gallery Investigation, Design and Reneval	83,00 135,00
cannearte Water Take Resource Consert Jannearte Gregg St Booster Pump Str.	79,00
tural Mulin Link - Stage 1 - Plant to Reserveir 2 fotal Capital Expenditure: for Reneval	
	63,826,53
otal Capital Expenditure for Water Supplies	63,826,534
iotal Capital Expanditure for Water Supplies.	63,826,53 82,930,45
otal Capital Espendiane for Waer Supplea Aom Water 66	7,171,56 63,8 26,53 82,9 30,45
iztal Capital Expand sure. Ex Water Supplies Room Valuer Dota C scotwarter Hertando Devrlageners	7,11,200 63,8,20,530 82,930,453 750,000
Instit Carlot Dependition for Maar Steppins Sonn Weer Sol Date & Science Son Maar Steppins Date & Science And Maar Steppins Date & Science And Maar Steppins	750,000 7,21,23 750,000 7,21,23 8,171,28



Carterton Council (Actual Dollars, Real)

\A/atau (Sumaly	
waters	Suppry	22 176 240
	Mains Renewals / Replacement	22,176,240
	Replace Pumps at Plimsoil st Pressure station	108,000
		865,500
	Boundary backflow devices upgrade	530,400
	Kaipatangata Trunkmain seismic resilience	571,500
	Kaipatangata Streamweir and level sensor replacement	-
	Asset Conditions Assessments	1,325,394
	Kaipatangata water treatment plkant - bag fillers	230,800
	Kaipatangata Water treatment plant - filler media	-
	Replacement tank liners	406,400
	Fredrick st WTP - Ph correction	-
	Water Treatment plants - SCADA and Telemetry Upgrades	102,000
	Site Security (Treatment Plants)	44,400
	Nitrate Management	7,491,000
	Kaipatangata WTP - Surface take consent renewal	166,500
	Additional Investment	5,000,000
	Additional Renewals Growth	5,000,000
	Total	44,018,134
	Check	
WasteV	Vater	
	Renewals / Replacements	26,018,950
	Hydrolic Modelling - Stage 1	-
	Hydrolic Modelling - Stage 2	-
	Hydrolic Modelling - Stage 3	25,500
	Hydrolic Modelling - Stage 4	20,400
	Asset Condition assessments	1,072,581
	Reactive work renewals	980,900
	Pump Replacements (17 Stations)	921,000
	Oxidation ponds - Dissolved oxygen	27,000
	Headworks Upgrade - Stage 1	2,550,000
	Headworks Upgrade - Stage 2	9.150.000
	Oxidation ponds sludge removal staged	1.125.000
	Site Security (Treatment Plants)	44.400
	Oxidation Ponds Aerators replacement	262.800
	Wetlands Replanting	61 200
	Electrical Switch room upgrade - Stage 2	
	Soil Monitoring stations - Replacement	12 700
	Future new irrigation.	5 000 000
	Additional Renewals Growth	5,000,000
	Total	52 272 431
	Check	52,272,431
Storm V	Vater	
Storm V	Stormwater Discharge Concept Poowal	
	Notwork Dopowala	400 500
		499,500
		04.4 500
	וסלפו	814,500
	Check	
	Total	97,105,065



Appendix 8

WAIRARAPA 3X COUNCILS – WATER NETWORK ECONOMIC MODEL

COMPARISON TO THE REGIONAL MODEL

OUTPUT SUMMARY

24 September 2024





INTRODUCTION

- This slide pack has been prepared for Council officers to support their individual analysis and preparation of briefing materials.
- To facilitate informed decision-making, Gravelroad have been engaged to progressively develop a regional economic model. The level of detail in the model will increase with each phase of the programme, providing increasingly refined insights to support the critical decisions at the required milestones.
- We are currently in Phase 1, with modelling at a strategic level of analysis to support this phase of Council decision-making.
- Using the model, we have completed a high-level comparator of local Council and regional water service variables.
- This is indicative only input assumptions will continue to be developed and refined over time.





KEY ASSUMPTIONS AND CAVEATS

- **Comparison**: this council model scenario has been compared to the latest regional model scenario.
- To ensure an "apples for apples" comparison, key data inputs for models have been aligned for consistency (interest rates, compliance, 22-year network recovery period, price rise rate, etc.)
- Data inputs have been confirmed with Council officers.
- Uninflated values have been used. All prices and costs are in \$FY24.
- In addition to existing **council overhead** for water service delivery, it should be noted that:
 - additional overhead would be required to comply with economic regulation; and
 - additional capital is likely required for metering so that network quality can be measured, if not already included.
- Efficiencies: the regional model has not made any assumptions or allowance for efficiency gains at this phase.
- The calculated price is modelled based on assumptions and is an average per connection

 it is illustrative only and is not intended as an accurate estimate of actual price
 increases.





MODELING OBSERVATIONS

- 26.7% of assets in the categories of poor and very poor condition is worse than the average for the region. This is notably better than DIA's assessment of the assets, being Masterton 34%, Carterton 29%, and SW 14%.
- The high proportion of assets assessed in the categories of good or excellent condition (55.8%) means that bulk renewal of these assets will probably not be necessary over the next 20-30 years.
- The combined Wairarapa councils have the highest average water prices for the region, which means selffunding of the network remediation occurs earlier than for the regional option.
- An additional cost of ~\$6m pa to run a council owned CCO is included in the input costs. With 26.7% of assets classed as worn-out, the regulator will expect to see a plan for their renewal, and monitoring equipment to measure network performance. It is important these are fully costed in this +\$6m pa increment.
- While the Debt-to-Revenue ratio is within the LGFA 5% limit, the FFO to Debt ratio, which is likely the actual criteria for CCO funding, falls outside of the required max FFO ratio of 9% in the initial years.
- Pricing for the combined Wairarapa councils is higher than for a regional model, both for network remediation and for long term sustainability. Indicative pricing summary:

Average Price (\$FY24)	Council Model (v3.14)	Regional Model (v3.14)
Starting Price (FY25)	\$1,909	\$1,711
Peak Price (~2036-2050)	\$5,017	\$4,288
Long Term Sustainable Price	\$3,305	\$2,622





INPUT DATA FOR MODEL

3x Council specific model **Regional model** Yr0 (23/24) Yr1 (24/25) Yr2 (25/26) LTP Lead in - yrs 1-3 uninflated (FY24m) Yr3 (26/27) Yr0 (23/24) Yr1 (24/25) Yr2 (25/26) Yr3 (26/27) **Operating Revenue (Sm** 34.85 38.10 41.72 443 485 379 554 377 Opex inc CCO O/Hs, faults and interest but ex depreciation (\$m 37.84 38.39 41.16 347 352 FFO ex faults (Sm -0.29 -2.98 0.57 96 133 177 3.85 4.25 5.30 97 41 Interest (Sm 82 86 Faults Cost (Sm 3.33 3.47 3.57 41 41 315 522 EBITDA ex faults (\$m 4.19 7.43 9.43 219 260 Total Network Capex (\$m 29.25 35.19 46.50 622 590 112 115 264,161 Growth Costs (\$m 3.02 5.47 6.69 118 135 Compliance Costs (\$m 19.22 7.31 10.85 86 61 Properties Served 18,257 18,513 18,772 18,005 256.307 258.951 261.956 Average price per connection (\$/year 2.058 2,223 1,909 2,097 1.479 1.711 1.851 74.7 89.9 117.6 2,284 Closing Debt (\$m) 1.823 2,076 LTP Price rise #DIV/0! 7.8% 8.0% 13.3% 15.7% 8.2% Exceller 27.5% 28.0% 28.3% Good 28.49 Medium 17.5% 18.9% Poo 18.2% 11.3% Very poor 8.5% 13.3% 100% 100% Opening total network replacement value (Sm) 1,237 19,710 Opening properties served (yr 4) 19,035 267,595 Properties served organic growth rate 1.40% 1.30% Average initial network value per connection (\$) 65,003 73.656 Initial growth cost per property before DC's (\$) 38,308 38,308 Proportion of growth costs per property met by DC's 38% 38% Real DC % on 15 year average recovery of DC 32% 32% Network marginal organic capex growth 59% 52% 25% 25% Network marginal organic opex growth 6.00% 6.00% Interest rate 150% Peak funds from operations permitted above sustainability 150% Year 3 Revenue (\$m) 42 554 9.0% until year 9.0% until year Initial Annual Price increase from year 3 9.0% Subsequent annual price increase 290 Year 4 Overheads excluding interest and faults (Sm) 36 Overheads growth pa 1% 1% Year 3 EBITDA ex Faults (\$m) 315 9 160 2.000 Total estimated compliance cost (\$m) 5.0% 5.0% Lead in compliance capital spend as proportion of network investment 1.60 20 Minimum fixed compliance capital pa (\$m) 9% 9% Minimum FFO to Debt funding ratio iKAVEL 5.0 5.0 Maximum Debt to revenue funding ratio 1.5 Residual debt to revenue ratio target 1.5

thinking beyond consulting



CASH USE



3x Council Water Entity































KIIAI



STARTING ASSET CONDITION



3x Council Water Entity

Regional Water Entity







WORN-OUT ASSETS







ESTIMATE FAULTS COST FROM WORN-OUT ASSETS





Regional Water Entity

ŀΚ

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CHANCE OF NETWORK CRITICAL FAILURE









OUTPUT DATA FROM MODEL

3x Council specific model **Regional model** Network Inputs Expected Average Asset Service Life (yrs) 74.0 74.0 Initial annual fault cost (\$m) 4 41 540 Total annual capital investment after LTP lead in until remediation is complete (\$m 44 Initial Annual funds from operations (Sm) 315 9 Failure rate index (bathtub curve) (1-linear, 2=square law, 3=cubic etc) 2 Failure rate curve begins at x% of EoSL 75% 75% **Consolidated Input Costs and Metrics** Proportion of network 100% 100% Opening replacement value of network (\$m) 1,237 19,710 Initial Annual Sustainable Replacement Cost (\$m) 16.7 266.4 Proportion of network over EoSL 27% 25% Equivalent maximum asset age (yrs) 101.0 98.2 Initial backlog period (yrs) Initial Value of network over EoSL (\$m) 27.0 24.2 330 4,861 Network Economics during Network Remediation period Total cost of Catch Up renewal during network remediation (\$m) Remediation period (yrs) 330 22 4,861 2046 2046 22 Total cost of compliance during network remediation (\$m) 120 1,394 Compliance backlog period (yrs) 24 2048 2048 24 Net Growth Costs during Remediation (\$m) 157 2,190 Keep Up costs during remediation (\$m) 344 5,406 Total period fault cost (\$m) 42 479 430 1,422 4,523 18,854 Total interest cost (\$m) Total costs over remediation period (\$m) Total Network Cost over remediation period (\$m) 993 14,331 Remaining Compliance cost after remediation (\$m) 45 675 Funding Peak Debt (\$m) 315 3,344 11 2035 Peak debt occurs at (yr) 2032 8 Debt repaid at (yr) Maximum FFO funding gap (\$m) 29 2053 2051 27 100 301 Occurs in y 2030 2025 Total Interest cost over remedial period (\$m) 430 4,523 47% 30% 8% 11% 3% Proportion of investment spent on network 54% 24% 7% 12% Proportion of investment spent on interest Proportion of investment spent on compliance Proportion of investment spent on net growth costs Proportion of investment spent on faults 3% 100% 100% Peak to FY25 price ratio during catch up 263% 251% Price rise peaks in year 23 2047 23 2047 Sustainable price to FY25 price ratio after network remediation 173% 153% 10 Year average from start of entity (\$m) 594 226 150 Network Capex 44 Spent on: Keep-up 14 Catch-up 13 141 Growth 11 Compliance 50 Faults 28 137 Interest from opening debt Interest from incremental debt 45 **Reliability calcs** 60% 55%

GRAVELROAD

Cumulative risk of Critical Failure before Network Remediat	ion
seline Cumulative risk of Critical Failure before Network Remediation (no worn out asse	ts)

10%

10%

B



Wairarapa and Tararua Water Done Well 'WAI + T' ANALYSIS

Assessment of the financial sustainability of a potential joint Wairarapa/Tararua water services CCO

11 November 2024

This document has been prepared to provide information to Carterton District Council, Masterton District Council, South Wairarapa District Council and Tararua District Council (together 'Wairarapa/Tararua councils') on the financial sustainability of water services provision (as indicatively assessed against the requirements for Water Services Delivery Plans), and to provide information relating to a potential Joint Wairarapa/Tararua water services CCO. The Department of Internal Affairs has relied on information provided by Wairarapa/Tararua councils in the development of the analysis and guidance included in this report. This guidance is not legal advice; and is intended to support Wairarapa/Tararua councils' decision-making requirements under Local Water Done Well.

Te Kāwanatanga o Aotearoa New Zealand Government



Te Tari Taiwhenua Internal Affairs



Wairarapa and Tararua Joint Council Project: 'WAI + T'

Carterton District Council, Masterton District Council, South Wairarapa District Council and Tararua District Council have entered a joint terms of reference to:

- Enable the councils and communities to make an informed decision on the arrangements under which they will deliver a Water Services Delivery Plan.
- Provide sufficient supporting evidence and a decision-making framework to enable evaluation of a joint operating model against other options for the delivery of water services (including the status quo).

The scope of this project is to develop a joint arrangement option encompassing the Wairarapa and Tararua councils that is sufficiently detailed to enable it to be compared against other options.

The Council Grouping approached the Department of Internal Affairs ('The Department') for analytical and guidance support to investigate the financial sustainability and viability of status quo in-house water services delivery, and that of potential new joint delivery arrangements for water services.

The Department has worked with each participating council to confirm baseline positions and provide initial guidance on the financial sustainability of status quo water services delivery.

This report sets out an assessment of the viability of a 'WAI + T' Water CCO.

Separate reports for each council have also been developed and provided. These reports provide further analysis and guidance on the financial sustainability of the councils' water services (for their component part of 'WAI + T'), trade-off decisions to consider, and benefits that could be realised through establishing a 'WAI + T' Water CCO.



Key insights on a 'WAI + T' Water CCO

- 1. Our analysis of LTP information and additional details provided by Wairarapa and Tararua councils indicates that a **joint 'WAI + T' model would be financially viable** at LTP projected levels of revenue, debt and investment.
- 2. Each council has different investment requirements and costs of service. Our analysis retains regional differences as this ensures that prices that different communities pay (as modelled) would reflect the direct costs of service to each community. It is important to note that there is **no requirement to harmonise prices across communities under Local Water Done Well**.
- 3. Our analysis demonstrates that **a more affordable price path for water charges could be realised**, subject to trade-offs between revenues, levels of investment and debt financing.
- 4. The additional borrowing headroom that can be accessed by establishing at 'WAI + T' Water CCO would create additional flexibility to efficiently deliver water services to the Wairarapa and Tararua communities.
- 5. For **Carterton District Council and Masterton District Council** this includes an **ability to reduce water services prices** for communities against what is projected in LTPs. Alternatively, these councils would have **scope to increase or accelerate investment** at LTP projected revenues.
- 6. For Tararua District Council and South Wairarapa District Council, the primary benefit is that a 'WAI + T' Water CCO will enable the funding and delivery of their significant capital programmes. Optionality remains to trade off proposed levels of investment versus affordability for consumers.
- 7. Establishing a 'WAI + T' Water CCO will deliver significant financial benefits to all owning councils, through the establishment of new borrowing headroom, due to water services being higher leveraged than other council activities. Significant financial benefits of establishing a Water CCO accrue to owning councils themselves.
- 8. The benefits for each council, when compared to status quo delivery, vary by council based on the initial starting point, projected investment requirements and costs of service. This report and supporting reports provided to each council individually outline the **trade-offs that each council** will need to consider to realise the full benefits of Local Water Done Well.



A 'WAI + T' Water CCO would be financially viable

Our analysis of the financial information provided by Wairarapa and Tararua councils demonstrates that **a 'WAI + T' Water CCO would be financially sustainable** at LTP projected levels of investment, revenues and debt financing.

A 'WAI + T' Water CCO would also meet the financial sustainability requirements of Water Services Delivery Plans.

A 'WAI + T' Water CCO will:

- Be **able to access additional debt financing from LGFA** up to the equivalent of 500% of operating revenues (a significant uplift against what Wairarapa and Tararua councils can achieve on a stand-alone basis).
- Improve the financial resilience for water services delivery across the Wairarapa and Tararua.
- Provide the ability to fund the required levels of water services investment, with scope to increase and/or accelerate proposed investment.
- Provide the opportunity to deliver **lower water charges to Wairarapa and Tararua consumers** than what councils could deliver on a stand-alone in-house basis.
- Create new borrowing headroom for owning councils if water services revenues and debt are transferred to a 'WAI + T' Water CCO. This new borrowing headroom could be used to fund non-water investment that is projected to be revenue funded, leading to a reduction in projected rates increases.
- Enable an **efficient financing strategy for water services** to be developed and implemented.



Further analysis is required with trade-offs to consider for each council to unlock the benefits of Local Water Done Well

Based on the current set of financial projections for each council, a **combined 'WAI + T' Water CCO would be financially sustainable**.

Wairarapa and Tararua councils should however **continue to investigate their water services financial projections and financial strategies to realise the full set of benefits** that Local Water Done Well and the LGFA financing solution for water CCOs provide.

We have separately provided a report to each council outlining some of these considerations and trade-offs to be considered.

Each council should look to **strike an effective balance between levels of investment, debt financing and affordability** for consumers when developing a Water Services Delivery Plan, confirming financial projections and developing implementation plans.

There is significant scope for debt financing to be more effectively utilised to increase and/or accelerate investment, or to reduce charges for consumers.

Each council should also review the projected water services investment included in their 2024-34 LTP (or other council projections) against the minimum requirements required in Water Services Delivery Plans guidance and look to identify any potential savings or efficiencies that could be gained to reduce the total investment requirement.

Savings to investment programmes could be identified through:

- Wairarapa and Tararua councils working together on joint investment programmes, including identifying new opportunities to deliver regional solutions at lower cost, rephasing of investment, or developing efficient joint procurement approaches to lower costs; and/or
- Working through the impact that expected changes to regulatory standards signalled by the Government will have on water services investment requirements.



Carterton District Council

The transfer of Carterton District Council's water services into a 'WAI + T' Water CCO could:

- Create \$30 million of initial borrowing headroom for water services delivery to Carterton communities; and
- Create **\$16 million of new borrowing headroom for Carterton District Council** initially (growing to \$31 million by FY33/34). This new borrowing headroom **could be used to fund non-water investment** that is projected to be revenue funded, with a corresponding **reduction in non-water rates requirements**.

The additional capacity for water services through a 'WAI + T' Water CCO could:

- Be retained for future requirements (i.e., with no change to LTP projected revenue or investment requirements); or
- Enable \$13 million more capital investment over the LTP period at LTP projected revenues (+18%); or
- Eliminate 10% of projected rates requirements for water services over the LTP period (\$9 million), generating savings of >\$300 per household per year; or
- Be applied to some combination of improved financial resiliency, increased investment and reduced prices.

Masterton District Council

The transfer of Masterton District Council's water services into a 'WAI + T' Water CCO could:

- Create **\$42 million of initial borrowing headroom for water services delivery** to Masterton communities; and
- Create \$30 million of new borrowing headroom for Masterton District Council. This new borrowing headroom could be used to fund non-water investment that is projected to be revenue funded, with a corresponding reduction in non-water rates requirements.

The additional capacity for water services through a 'WAI + T' Water CCO could:

- Be retained for future requirements (i.e., with no change to LTP projected revenue or investment requirements); or
- Enable \$64 million more capital investment over the LTP period at LTP projected revenues (+68%); or
- Eliminate 15% of projected rates requirements for water services over the LTP period (\$28 million), generating savings of \$300 per household per year; or
- Be applied to some combination of improved financial resiliency, increased investment and reduced prices.

DISTRICT COUNCIL TE KAUNINERA Å-RONE O WAAKAORION

Benefits for each council that could be realised from establishing a 'WAI + T' Water CCO

South Wairarapa District Council

"The benefits to SWDC on being able to deliver a full capital programme under a 'WAI '+ T' Water CCO accrue to the community as adequate investment is made at least cost, using a portfolio optimization approach to capital delivery across a greater population/area in a prioritised way. This is complimented by an efficient financing structure with adequate headroom, setting us up for success and allowing intergenerational equity in paying for long term infrastructure.

Without this, SWDC would struggle to deliver a full suite of wastewater treatment plant upgrades for compliance and capacity needs and the burden would unfairly fall on today's ratepayers overburdening them and/or stymying growth in our townships." [comment provided by SWDC officers]

On a stand-alone basis, SWDC would face significant challenges in meeting the financial sustainability requirements for Water Services Delivery Plans.

Establishing a regional water CCO is critical to SWDC's ability to be able to submit a financially sustainable plan and will enable financially sustainable water services.

The transfer of SWDC's water services into a joint CCO could:

- Enable the full \$145 million water services capital investment requirement to be funded sustainably;
- Provide a **stable delivery model** for SWDC to **continue to refine its investment requirement**, considering different levels of investment against affordability for consumers; and
- Enable water services debt to be treated separately from SWDC as owning council by LGFA, improving SWDC's credit position.

'WAI + T' will enable the **delivery of a substantial capital programme** for water services infrastructure, enabling SWDC to **meet regulatory standards**, **uplift levels of service** and **enable housing growth**.

Tararua District Council

The transfer of Tararua District Council's water services into a joint CCO could:

- Enable the full \$150 million water services capital investment requirement to be funded sustainably; and
- Create \$42 million of new borrowing headroom for Tararua District Council initially (growing to \$66 million by FY33/34). This would effectively eliminate all council net debt by FY33/34.

The additional borrowing capacity for Tararua District Council could:

- Be used to fund non-water investment that is projected to be revenue funded, to offset or eliminate projected rates increases; or
- Potentially be capitalised (e.g., as some form of debt or equity investment in 'WAI + T') to **reduce projected water charges**.

If \$50 million of Tararua District Council's headroom is utilised for water services, this could **decrease average water bills by \$7,000 + GST per household over the first 8 years** of operation (21% saving).

DISTRICT COUNCIL



Proposed levels of investment across 'WAI + T' councils

- Wairarapa and Tararua councils are projecting \$461 million of capital investment into water services infrastructure over ten years. This proposed level of investment is substantial and is more than double projected depreciation charges over ten years.
- While this capital programme is fundable under a 'WAI + T' Water CCO, there would be merit in the Wairarapa and Tararua councils developing a joint investment programme to determine the most efficient and deliverable phasing of investment, and to identify opportunities to reduce costs.
- Tararua and South Wairarapa councils' investment programmes are significantly larger on a per connection basis than Masterton and Carterton councils. Consideration should be given to the relationship between proposed investment and levels of service versus the affordability of charges for consumers to strike an appropriate and financially sustainable balance.
- Masterton and Carterton councils have scope to increase or accelerate investment (against LTP) based on their current projected water revenues.







Projected prices and borrowings at proposed levels of investment

Household water charges are directly determined by proposed levels of investment, operating expenses and the utilisation of debt financing versus revenue funding of investment. Each council is facing trade-off decisions on these factors.

- Carterton District Council: Projected water charges are materially in line with the 'WAI + T' average. This is due to investment and net debt per connection being in line with the 'WAI + T' averages. CDC could eliminate 10% of projected rates requirements for water services over the LTP period (\$9 million), generating savings of >\$300 per household per year if debt financing is more appropriately utilised.
- Masterton District Council: Projected levels of operating expenses, investment and borrowings are significantly lower than the other 'WAI + T' councils, resulting in lower projected household charges. MDC could eliminate 15% of projected rates requirements for water services over the LTP period (\$28 million), generating savings of \$300 per household per year if debt financing is more appropriately utilised.
- South Wairarapa District Council: Projected household water charges are above the 'WAI + T' average. This is due to the \$145 million capital investment programme, which requires substantial debt financing and revenues to be set to a level that is sufficient to cover costs and service borrowings. Any reduction in total projected investment requirements would decrease projected charges to consumers.
- Tararua District Council: Projected household water charges are above the 'WAI + T' average. This is due to the \$150 million capital investment programme, high initial leverage for water services, substantial projected debt financing, and the need for revenues to be set to a level that is sufficient to cover costs and service borrowings. Any reduction in total projected investment requirements would decrease projected charges to consumers. Tararua District Council could also consider options relating to the treatment of internal borrowings to reduce water services leverage and charges. Note TDC projected charges are higher in later years due to revenues driving operating cash margins to pay down debt (see charts on slide 29).





Projected prices could be lowered through trade-off decisions on investment and debt financing for a more affordable service to consumers

The charts below compare projected charges to households under the 'base case' financial projections included in this report, and an alternative scenario where each council makes trade-off decisions to deliver more affordable services and reduce projected charges to consumers. Key assumptions for each council in this alternative scenario are set out below.

- Carterton District Council: Additional utilisation of debt financing for investment requirements means that water revenues could be decreased, while remaining financially sustainable. Under this scenario projected prices are 10% lower, generating savings of >\$300 per household per year.
- Masterton District Council: Additional utilisation of debt financing for investment requirements means that water revenues could be decreased, while remaining financially sustainable. Under this scenario projected prices are 15% lower, generating savings of \$300 per household per year.
- South Wairarapa District Council: Opportunities are identified to reduce the ten-year capital investment requirement from \$145 million to \$100 million through developing a joint capital programme and procurement approach with 'WAI + T' councils, with some non-critical investment deferred. This enables borrowings and revenues to be reset, whilst remaining financially sustainable. Prices reduce by on average approximately \$400 per year.
- Tararua District Council: Opportunities are identified to reduce the ten-year capital investment requirement from \$150 million to \$100 million through developing a joint capital programme and procurement approach with 'WAI + T' councils, with some non-critical investment deferred. This enables borrowings and revenues to be reset, whilst remaining financially sustainable. Prices reduce by on average approximately \$700 per year. Note: a similar outcome could be achieved through utilising TDC borrowing headroom to finance out internal borrowing arrangements for water services.

Base case scenario – 2024-34 LTP and other financial projections provided by 'WAI + T' councils



Alternative scenario where Local Water Done Well is utilised to make trade-off decisions that reduce charges to consumers





Further guidance and analysis to support Wairarapa and Tararua councils

We have attached further information for Wairarapa and Tararua councils' consideration:

- Annex 1: Local Water Done Well overview and benefits of establishing water CCOs to access increased debt financing provides further information on how establishing a regional water CCO will deliver significant benefits to Wairarapa and Tararua councils and communities.
- Annex 2: 'WAI + T' Water CCO: financial sustainability assessment provides further detail on 'WAI + T' investment, revenue and debt financing, and an indicative financial sustainability assessment.
- Annex 3: Comparison of 'WAI + T' councils' water services sets out 'WAI + T' councils' projected water services and compares investment, operating costs, revenue and debt financing across Wairarapa and Tararua councils.
- Annex 4: 'WAI + T' Water CCO: projected consolidated water services financials provides consolidated projected financial statements which aggregate the water services financial projections provided by Wairarapa and Tararua councils.

Separately, we have provided a report to each council which provides further analysis and guidance on trade-offs and benefits that could be attained for each council through establishing a 'WAI + T' Water CCO.

We have also provided a Water Services Delivery Plan financial template to each council, and the aggregated financial model that underpins the analysis in this pack.

Further guidance

The Department is currently preparing a round of guidance relating to the benefits, and practical steps involved with establishing a CCO. This guidance has been prepared in response to feedback from our council engagements over the last two months. Much of this guidance builds on information provided to Council Chief Executives and Mayors in a letter from the LGFA in early October.

The guidance material will include key concepts around the implication of additional borrowing, worked examples, guidance for decision makers regarding the choice of delivery model, and templates for legal documentation required to establish a Water CCO.

We expect to release this guidance towards the end of November.



Local Water Done Well overview and benefits of establishing water CCOs to access increased debt financing

ANENX 1



Local Water Done Well: A new approach to water services delivery

- The Coalition Government believes communities are best placed to make decisions about the future of their water assets.
- Local Water Done Well places **obligations on local authorities** to demonstrate their service delivery arrangements are fit for purpose.
- This includes setting out how their **delivery models** will ensure high-quality, financially sustainable services in the long run.
- The Government expects councils will work together to address **financial sustainability and affordability challenges**.
- All councils are required to **develop Water Services Delivery Plans** which will outline how **water services will be delivered in a financially sustainable manner** by 30 June 2028.

Purpose of Water Services Delivery Plans

The Local Government (Water Services Preliminary Arrangements) Act 2024 sets out the content requirements, timeframe, and process for developing and accepting Plans.

Plans are intended to be a strategic decision-making tool for councils to consider current and future delivery of water services, and will:

- Set out how councils will deliver high-quality, financially sustainable water services in the long run; and
- Include information on councils' water services, how much they need to invest, and how they plan to finance and deliver it through their preferred water service delivery model.

Most information required for the Plans is expected to come from councils' existing documents, such as long-term plans, financial accounts and asset management plans.

• One-off, transitional documents

- O Cover drinking water, wastewater and stormwater
- Information to support development of economic regulation
- Can be developed by individual or joint councils
- Streamlined approach to consultation
- 10-year timeframe; may cover up to 30 years, with detailed info on first three



LGFA provides financing to deliver financially sustainable water services

LGFA financing of water CCOs

A key pillar of Local Water Done Well is LGFA's commitment to lend to water CCOs and treat their debt as separate to owning councils' debt, where there is a guarantee or uncalled capital from owning councils in place, and adherence to prudent credit criteria.

LGFA can immediately start lending to water CCOs, at a level needed to fund the investment we need to make in water infrastructure.

The benefit for ratepayers in this is that using more long-term borrowing to fund investment in long term infrastructure spreads the cost of this investment over the life of the assets. That in turn reduces the need to fund investment directly from rates and will reduce the upward pressure on rates that we've seen reflected in rates increases in recent months.

Financial covenants will need to be agreed between Councils and LGFA, with a free funds from operations (FFO) to debt ratio the most likely covenant.

The FFO to debt ratio will be set up to an equivalent level of 500% of water revenues. The level of the ratio will be different between water CCOs.

It's important to note that at this time, LGFA will only lend to water CCOs that are financially supported by their parent council and councils. Financially supported means either a guarantee or uncalled capital to match the liabilities of the water CCO (consistent with legislation).

Prudent credit criteria

- · Asset owning CCO with the ability to set and collect water revenues
- Professional Board in place with separation from elected members
- Minimum free funds from operations (FFO) requirements to support debt capacity to level equivalent to five times revenues
- CCO to have the characteristics of 'investment grade' over the mid-term (within ten years).

Increasing water borrowing ability to 5x revenues

A water services CCO can borrow up to a level equivalent to five times revenues for water services, subject to meeting LGFA's prudent credit criteria.

This represents a significant uplift against current borrowing limits for councils (175% - 280%).

Given higher leverage for water, this also significantly increases the total borrowing capacity for owning councils.


Benefits for councils and communities enabled by LGFA financing

- Using debt financing for investment in infrastructure is a fundamental aspect of delivering utilities, and water services are no exception.
- The Minister of Local Government has spoken of the infrastructure deficit New Zealand is facing with water. The financing arrangements provided by LGFA provide councils with increased lending flexibility to address these challenges, while ensuring affordability for ratepayers.
- Increased borrowing to fund necessary investment in water infrastructure reduces the need to fund investments directly from rates and other revenue. This can smooth the impact of investments across longer periods of time, which should be reflected in smaller increases in rates and water charges.
- Councils will be keen to spread the cost of upgrading water assets over time. LGFA will endeavour to provide some flexibility in its application of borrowing ratios provided the water CCO is committed to improving its credit metrics over time
- Irrespective of whether the water CCO is wholly or partially owned by a council, LGFA will take the approach of assessing the credit quality and potential borrowing capacity of the water CCO and the parent council(s) separately. This is subject to LGFA being satisfied of the ability of such council and water CCO to meet their financing obligations on a prudent basis.
- There are real benefits for councils that establish water CCOs to access the additional debt financing LGFA can provide. We encourage councils to consider what a water CCO could achieve for your council and communities.

The following slide summarises the key benefits of utilising LGFA financing for water services.



Benefits for councils and communities enabled by LGFA financing

The LGFA have agreed in principle to lend up to an equivalent of 500% of revenues to councilcontrolled water organisations.

This creates additional debt borrowing capacity for both the water organisation and for owning councils.

Having access to additional debt has positive implications for the affordability and sustainability of water services delivery.

Potential to reduce to cost to ratepayers	Utilising debt financing for capital investment reduces the requirement to generate operating revenues and surpluses to direct fund capital expenditure. This leads to lower charges for ratepayers.
Spreading the cost over time	Debt financing allows the CCO to spread the cost of large investments over years or decades. By using debt, the council ensures that the cost of the asset is shared across those who will benefit from it in the future.
Immediate access to funding	Debt provides immediate access to large amounts of capital, enabling the council to undertake necessary investments without having to wait years to accumulate sufficient rates revenue. For water assets, this reduces the risk of further degradation.
Maintaining service levels	Debt financing allows the council to avoid steep rate hikes while still being able to fund important projects and maintain or improve service levels for the community.
Utilising rates for opex and debt servicing	By using debt to fund capital expenditure, critical services are not being compromised or traded off to fund large projects. Operating revenues can be set to the minimum level required to cover the operating cost of service (including servicing debt) only.
Cash reserve and flexibility	Debt financing can allow the council to preserve financial reserves for emergencies or other priority areas.



A 'WAI + T' Water CCO will enable the adoption of a fit-for-purpose financial strategy for water services delivery

An efficient financing strategy for water services enabled by a water CCO that can borrow through LGFA

- Operating revenues should pay for operating costs.
- Capital investment requirements should be funded by capital i.e., capital revenues (such as Development Contributions) and debt financing.
- It is highly inefficient to fund capital investment of long-lived water services infrastructure through operating revenues.
- In LTPs, councils nationally are proposing approximately \$40 billion of capital investment for water services over ten years. Only \$13.4 billion of this investment is proposed to be debt funded (34% of the total); with operating revenues proposed to fund \$20.7 billion worth of investment (53% of the total).
- Councils have the opportunity through the new structural and financing tools under Local Water Done Well to reset this imbalance in Water Services Delivery Plans, to increase the amount of debt financing for capital investment and decrease the use of operating revenues to pay for capital investment.

'Operating revenues should pay for operating costs'

- Financial sustainability and ringfencing requirements mean that operating revenues should be set to a level that covers the operating cost (including servicing debt) of water services.
- Operating revenues should cover all cash operating expenses plus a minimum FFO requirement (indicatively equivalent to 8 – 12% of net debt each year, depending on credit profile).
- This ensures that sufficient operating cashflows are secured to support borrowing and investment requirements (including staying below borrowing limits).
- Setting operating revenues to levels higher than needed to cover cash operating costs and debt servicing/support requirements is inefficient when there is available debt capacity to fund investment requirements.
- Operating cashflows should be used to manage or repay existing debt, rather than fund new capital expenditure.

'Capital should pay for capital'

- Capital revenues (such as Development Contributions and capital subsidy revenues) should be applied to capital expenditure.
- Capital expenditure into water services infrastructure assets should be funded from capital sources i.e., capital revenues and debt financing.
- New debt drawdowns for capital investment reduce the cost burden on current ratepayers and consumers and enable this cost to be spread over the useful life of the asset.
- Capital inflows (including new borrowings) and capital outflows (i.e., investment) should balance, once accounting for any free operating cash flow generated from revenues that is used to manage or pay down debt.
- This means that all new capital investment is funded from capital sources, with surplus cashflows from operations used to pay down debt on existing debt for current infrastructure, rather than to pay for new investment.



Characteristics of a 'WAI + T' Water CCO established under Local Water Done Well

The establishment of a council owned water CCO under Local Water Done Well will enable:

- Retained local ownership of and direction setting for water services and infrastructure assets, at minimal financial cost to councils; 1.
- Reform of the water services industry that will create opportunities for new capital and operating efficiencies for water CCOs; and 2.
- Additional flexibility and financial resilience to ensure financially sustainable water services provision. 3.

Characte	eristics of water services CCOs established und	er Local Water Done Well
1. Retained local ownership of and direction setting for water services and infrastructure assets, at minimal financial cost to councils	2. Reform of the water services industry that will create opportunities for new capital and operating efficiencies for water CCOs	3. Additional flexibility and financial resilience to ensure financially sustainable water services provision
 This means: Councils retain local ownership of water services and infrastructure assets. Direct ownership interest for councils in the water CCO. Councils appoint Board members of a water CCO. Ability to set performance expectations to a new water CCO under a new planning and accountability framework. 	 This means: Professional, skilled, and independent directors appointed. An effective and appropriate capital structure for infrastructure business. Meeting LGFA's prudent credit criteria for additional financing. Providing operational and investment certainty. 	 This means: Increased access to debt financing through LGFA for water services (to an equivalent 500% of water revenues). Increased borrowing capacity for owning council, which enables councils to utilise new borrowing headroom to fund non-water infrastructure requirements and reduce non-water rates. Ability to plan long-term around investment and financing requirements. Increase proportion of investment that is debt-funded rather than rates funded.
 The water CCO will be required to provide a Water Services Strategy to shareholding councils under a new planning and accountability framework. Owning council guarantee (or uncalled capital) in place to ensure ongoing ownership and support arrangement, and enduring interests in the successful and financially sustainable delivery of 	 Easier to comply with ringfencing and economic regulation requirements. Focus on operational and capital efficiencies to deliver investment and services to communities at a more optimal cost. 	 Spread the cost of infrastructure over its life, ensuring intergenerational equity and minimising current consumers' subsidisation of future consumers use of long-lived assets being built now. More financial resilience and investment achievable. Potentially lower charges to consumers than would be the case

Potentially lower charges to consumers than would be the case under status quo in-house water services delivery arrangements.

water services to communities.

18



Increased access to debt financing for 'WAI + T' delivers significant benefits to Wairarapa and Tararua communities

The establishment of a water CCO under Local Water Done Well and more effective utilisation of debt financing provided by LGFA will enable:

- 1. Improved financial resilience for water services delivery and councils;
- 2. Increased or accelerated investment against what councils can currently fund or deliver in-house;
- 3. Lower prices for communities than achievable under the status quo; and
- 4. Increased borrowing headroom and financial resilience for owning councils.

Benefits from increased access to debt	tinancing for council owned water CCOs
1. Improved financial resilience for water services delivery and councils	3. Lower prices for communities than achievable under the status quo
 This means: An equivalent five times revenue borrowing limit will increase the borrowing capacity for water services investment. This provides enhanced resilience and ability to respond to shocks or adverse events. Able to borrow longer term to minimise refinance risk and gain long term financing certainty. 	 This means: Revenues to set to the minimum level required to cover the efficient cost of service. Utilising debt financing for capital investment means less revenue is required to deliver required levels of investment. Debt financing of investment means lower charges for current consumers. Reduces the requirement to fund capital investment for long lived assets that will benefit several generations with rates or charges paid today by current consumers.
2. Increased or accelerated investment against what councils can currently fund or deliver in-house	4. Increased borrowing headroom and financial resilience for owning councils
 This means: Additional borrowing capacity could be utilised to deliver additional capital investment against existing revenue and price paths. Required capital investment could be accelerated as financing barriers are reduced. Financing certainty will enable effective signalling of the investment pipeline to the sector to enable the sector to invest and grow capacity and ability to meet the domand of infractructure investment 	 This means: ✓ Separating water revenues and debt can create significant borrowing headroom for owning councils. ✓ Improved financial resiliency for councils. ✓ Created borrowing headroom could be utilised for non-water services capital investment requirements to reduce projected rates rises.



'WAI + T' Water CCO: financial sustainability assessment ANNEX 2



'WAI + T' combined water services capital investment

Overview of 'WAI + T' water services capital investment

Wairarapa and Tararua councils are projecting \$461 million of capital investment into water services infrastructure over ten years. This proposed level of investment is substantial – and is more than double projected depreciation charges over ten years.

The combined capital programme is heavily weighted to the first four years, averaging \$58 million per year from FY24/25 to FY27/28, with a peak of \$68 million in FY27/28.

The combined capital programme then reduces to \$30 - \$40 million per year from FY28/29.

While this capital programme is fundable under a 'WAI + T' Water CCO, there would be merit in the Wairarapa and Tararua councils working together on a joint investment programme to determine the most efficient and deliverable phasing of investment, and to identify opportunities to reduce costs.

Masterton and Carterton councils have significant scope to increase or accelerate investment (against LTP) based on their current projected water revenues.









'WAI + T' combined revenues and debt financing

Overview of 'WAI + T' water services revenues and debt financing

The projected levels of water services revenues are sufficient for the level of investment and expenditure proposed, and fully cover all operating costs including depreciation.

At a consolidated level, there is significant borrowing headroom against a 5x operating revenue debt limit. Based on projected levels of investment and revenues, a 'WAI + T' CCO would retain unutilised borrowing capacity across the entire LTP period, with this capacity increasing over the last five years due to projected revenue increases.

Each council has trade-off decisions to make between levels of revenue, investment and debt financing to strike an appropriate balance for consumers, as part of a 'WAI + T' Water CCO. There is scope for 'WAI + T' councils to reevaluate the level of water services revenues required, for the level of investment proposed, to potentially pass on savings to consumers. Effectively utilising debt financing is the key to unlocking this.









'WAI + T' Water CCO: Revenue sufficiency

Projected statement of comprehensive revenue and expense

Statement of comprehensive revenue and expense (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Operating revenue	48,393	53,614	60,289	64,599	68,782	73,088	75,815	79,121	82,232	86,007
Other revenue	4,504	853	871	889	905	920	937	954	971	989
Total revenue	52,897	54,468	61,160	65,487	69,688	74,008	76,752	80,074	83,203	86,996
Operating expenses	22,085	21,170	20,656	20,473	20,986	21,517	22,099	22,539	23,063	23,627
Finance costs	5,337	6,164	7,715	9,179	10,327	10,600	10,657	10,622	10,452	10,414
Overheads and support costs	7,135	7,363	7,565	7,622	7,859	8,127	8,262	8,502	8,752	8,900
Depreciation & amortisation	16,688	17,611	19,220	20,424	21,310	22,849	23,644	24,089	24,949	25,736
Total expenses	51,245	52,308	55,156	57,698	60,483	63,092	64,662	65,751	67,217	68,678
Net surplus / (deficit)	1,652	2,160	6,004	7,789	9,205	10,916	12,090	14,323	15,986	18,318
Revaluation of infrastructure assets	13,837	43,118	4,941	22,792	32,074	15,682	13,529	42,532	5,403	24,328
Total comprehensive income	15,489	45,278	10,945	30,581	41,279	26,598	25,619	56,855	21,389	42,647
Cash surplus / (deficit) from operations (excl depreciation)	18,340	19,771	25,224	28,213	30,515	33,765	35,734	38,412	40,935	44,055

Key water services metrics

Metrics	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Rates increase	13.0%	15.6%	14.3%	7.3%	6.6%	6.4%	3.8%	4.4%	4.0%	4.7%
Operating revenue increase	14.7%	10.8%	12.4%	7.1%	6.5%	6.3%	3.7%	4.4%	3.9%	4.6%
Operating expenses increase	14.8%	-2.4%	-1.1%	-0.4%	2.7%	2.8%	2.4%	2.2%	2.5%	2.2%
Net debt to operating revenue	290.7%	329.2%	359.9%	397.2%	389.1%	374.7%	369.1%	346.4%	324.3%	303.7%
FFO to net debt	9.8%	10.7%	11.2%	10.6%	11.1%	12.0%	12.4%	13.7%	15.0%	16.5%

Commentary on water services revenue and expenses

- There was an average 14.7% increase in water services operating revenues in FY24/25 across 'WAI + T' councils, which is due to a 14.8% increase in operating expenses.
- Double digit average operating revenue increases are projected for FY25/26 and FY26/27, with subsequent increases more moderate over the remainder of the 2024-34 LTP period.
- The projected levels of water services revenues are sufficient for the level of investment and expenditure proposed, and fully cover all operating costs including depreciation.
- In years 5 10 of the LTP period, water services revenues generate cashflows which decrease the leverage of 'WAI + T'. Net debt to operating revenue peaks at 397% in FY27/28 before reducing to 304% in FY33/34.
- Water services are projected to provide funds from operations ('FFO', i.e., operating cashflows) of \$14 million in FY24/25, which represents 9.8% of water services debt.
- Due to projected revenue increases, free funds from operations increase to \$43 million in FY33/34, which represents 16.5% of projected FY33/34 water services debt.
- A 'WAI + T' Water CCO that borrows through LGFA would be likely required to maintain a minimum FFO to debt ratio of 8 -10%.
- There is scope for 'WAI + T' councils to individually reevaluate the level of water services revenues required, for the level of investment proposed by each council.
- Establishing a water CCO that could borrow to 5x operating revenues could provide an opportunity to reduce revenue requirements for water services where projected FFO exceeds the minimum requirement.

Revenue sufficiency performance measures

Average charge per connection including GST

Average charge per connection including GST	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Average drinking water bill (including GST)	968	1,104	1,213	1,273	1,364	1,388	1,424	1,527	1,545	1,589
Average wastewater bill (including GST)	1,065	1,227	1,425	1,530	1,593	1,702	1,766	1,775	1,837	1,893
Average stormwater bill (including GST)	167	182	201	208	216	248	232	231	249	276
Average charge per connection including GST	2,200	2,513	2,839	3,011	3,173	3,338	3,422	3,533	3,631	3,758
Projected increase	11.7%	14.2%	13.0%	6.1%	5.4%	5.2%	2.5%	3.2%	2.8%	3.5%

Operating surplus ratio: does operating revenue cover operating costs including depreciation?

Operating surplus ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Operating surplus/(deficit) excluding capital revenues	(2,852)	1,306	5,133	6,901	8,299	9,996	11,153	13,369	15,015	17,330	85,651
Total operating revenue	48,393	53,614	60,289	64,599	68,782	73,088	75,815	79,121	82,232	86,007	691,940
Operating surplus ratio	(5.9%)	2.4%	8.5%	10.7%	12.1%	13.7%	14.7%	16.9%	18.3%	20.1%	12.4%

Operating cash ratio: what much cash is generated from operations?

Operating cash ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Operating surplus/(deficit) + depreciation + interest	12 926	10.017	24.252	77 774	20 610	22.044	24 707	27.450	20.064	42.056	202 171
costs - capital revenue	13,836	10,917	24,335	27,524	29,610	52,644	54,797	57,459	59,904	45,000	502,171
Total operating revenue	48,393	53,614	60,289	64,599	68,782	73,088	75,815	79,121	82,232	86,007	691,940
Operating cash ratio	28.6%	35.3%	40.4%	42.3%	43.0%	44.9%	45.9%	47.3%	48.6%	50.1%	43.7%

Commentary on revenue sufficiency for water services in 2024-34 LTP

- Projected operating revenues cover projected operating costs including depreciation.
- Funds from operations are higher than the minimum requirement for LGFA if a 'WAI + T' Water CCO is established.
- Proposed revenues for water services would meet the 'revenue sufficiency' test.
- 'WAI + T' councils could consider reducing projected revenues to pass on efficiency savings to consumers generated through establishing a 'WAI + T' Water CCO.





'WAI + T' Water CCO: Investment sufficiency

Projected water services investment

Projected investment by water service (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Drinking water											
Capital expenditure - to meet additional demand	532	2,354	556	2,022	609	1,690	634	1,760	93	95	10,345
Capital expenditure - to improve levels of services	9,192	5,670	10,209	10,580	4,773	3,042	3,245	730	843	758	49,042
Capital expenditure - to replace existing assets	20,228	17,828	17,906	22,203	12,619	13,536	17,146	11,990	15,829	13,051	162,337
Total projected investment in drinking water	29,952	25,852	28,671	34,805	18,001	18,268	21,025	14,480	16,765	13,904	221,724
Wastewater											
Capital expenditure - to meet additional demand	281	1,928	532	4,055	577	601	625	248	253	258	9,358
Capital expenditure - to improve levels of services	4,997	15,047	20,941	14,076	10,723	7,674	6,143	6,270	4,058	10,556	100,485
Capital expenditure - to replace existing assets	7,861	9,769	11,404	12,269	9,790	10,847	11,503	9,676	10,420	11,808	105,348
Total projected investment in wastewater	13,139	26,744	32,877	30,400	21,091	19,122	18,271	16,194	14,731	22,622	215,191
Stormwater											
Capital expenditure - to meet additional demand	257	697	268	0	0	0	0	0	0	0	1,222
Capital expenditure - to improve levels of services	0	1,088	1,115	626	470	482	493	0	0	0	4,274
Capital expenditure - to replace existing assets	944	1,200	2,763	1,987	2,003	2,127	1,944	1,952	2,014	2,065	18,998
Total projected investment in stormwater	1,201	2,985	4,146	2,613	2,473	2,609	2,437	1,952	2,014	2,065	24,494
Total projected investment in water services	44,292	55,581	65.694	67.817	41.565	39,999	41.733	32.626	33.511	38,592	461.409

Funding sources of projected investment

Projected investment by classification and funding source (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Capital expenditure - to meet additional demand	1,070	4,979	1,356	6,077	1,186	2,291	1,259	2,008	346	353	20,925
Capital expenditure - to improve levels of services	14,189	21,805	32,265	25,282	15,966	11,198	9,881	7,000	4,901	11,314	153,801
Capital expenditure - to replace existing assets	29,033	28,797	32,073	36,458	24,413	26,510	30,593	23,618	28,264	26,925	286,683
Total investment	44,292	55,581	65,694	67,817	41,565	39,999	41,733	32,626	33,511	38,592	461,409
Capital revenues	4,504	853	871	889	905	920	937	954	971	989	12,793
Increase/(decrease) in debt	12,787	27,625	34,409	29,668	10,158	5,288	3,411	(1,609)	(5,534)	1,307	117,510
Funds from operations	27,001	27,102	30,413	37,260	30,502	33,790	37,385	33,282	38,074	36,296	331,106
Total investment funding	44,292	55,581	65,694	67,817	41,565	39,999	41,733	32,626	33,511	38,592	461,409

Commentary on water services investment

- 'WAI + T' councils are projecting \$461 million of capital investment into water services infrastructure over ten years.
- \$287 million of this is for renewals, against ten-year depreciation charges of \$217 million.
- \$175 million investment is provided for improving levels of service and growth.
- Only \$118 million of this total capital investment requirement is currently projected to be funded by new borrowings over ten years (25% of the total). Revenues are projected to fund \$331 million of the total investment (72% of the total).
- There is significant scope for 'WAI + T' councils to reevaluate the revenue versus debt financing split of projected investment, given the additional borrowing capability for a 'WAI + T' Water CCO that is funded by the LGFA.
- Should a 'WAI + T' Water CCO be pursued, Wairapara and Tararua councils should consider increasing the proportion of capital investment that is debt funded, which spreads the burden of this investment on ratepayers over a longer period.
- Increasing the proportion of capital investment that is debt funded would deliver a corresponding reduction in operating revenues required. This would mean that projected water charges could be reduced for consumers.

Investment sufficiency performance measures

Asset sustainability ratio: comparison of renewals capital expenditure to depreciation

Asset sustainability ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total	
Capital expenditure on renewals	29.033	28,797	32.073	36.49	8 24.41	26.510	30,59	23,618	28,264	26,925	286.683	
Depreciation	16.688	17.611	19,220	20.42	4 21.310	22.84	23.64	24.089	24.949	25,736	216.521	
Asset sustainability ratio	74.0%	63.5%	66.9%	78.5	6 14.6%	16.0%	29.4%	(2.0%)	13.3%	4.6%	32.4%	
Asset investment ratio: comparison of total capital expenditure to depreciation												
Asset investment ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total	
Capital expenditure	44,292	55,581	65,694	67,8	17 41,56	39,99	41,73	3 32,626	33,511	38,592	461,409	
Depreciation	16,688	17,611	19,220	20,42	21,31	22,84	23,64	1 24,089	24,949	25,736	216,521	
Asset investment ratio	165.4%	215.6%	241.8%	232.1	% 95.0%	5 75.19	76.59	35.4%	34.3%	49.9%	113.1%	
Asset consumption ratio: comparison of book	value to rep	olacement	value									
Asset consumption ratio	FY24/2	5 FY25/	26 FY26	5/27 F1	27/28 F)	28/29 F	Y29/30	FY30/31	FY31/32	FY32/33	FY33/34	
Book value of infrastructure assets	655,	674 73	6,762 78	38,177	858,362	910,691	943,523	975,141	1,026,210	1,040,174	1,077,358	
Total estimated replacement value of infrastructure	1,068,	942 1,17	1,142 1,24	45,713 1	,340,307 1	,418,032	1,477,720	1,537,165	1,616,523	1,659,598	1,726,862	
Asset consumption ratio	61	2% 6	2 0%	62.2%	64.0%	64.2%	62.8%	62.4%	62.5%	62.7%	62 /1%	

Commentary on investment sufficiency for water services in 2024-34 LTP

- Wairarapa and Tararua councils are projecting \$461 million of capital investment into water services infrastructure over ten years. This proposed level of investment is substantial and is more than double projected depreciation charges over ten years.
- The proposed level of investment for water services would meet the 'investment sufficiency' test.





'WAI + T' Water CCO: Financing sufficiency

Financing sufficiency measures

Net debt to operating revenue ratio

Net debt to operating revenue	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Total net debt (gross debt less cash)	140,698	176,508	216,977	256,581	267,631	273,865	279,864	274,078	266,654	261,190
Operating revenue	48,393	53,614	60,289	64,599	68,782	73,088	75,815	79,121	82,232	86,007
Net debt to operating revenue	291%	329%	360%	397%	389%	375%	369%	346%	324%	304%
Borrowing headroom/(shortfall) against 500% LGFA limit for water CCO										

Borrowings headroom/(shortfall) against limit	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Operating revenue	48,393	53,614	60,289	64,599	68,782	73,088	75,815	79,121	82,232	86,007
Debt to revenue limit	500%	500%	500%	500%	500%	500%	500%	500%	500%	500%
Maximum allowable net debt	241,965	268,072	301,444	322,994	343,912	365,440	379,076	395,604	411,158	430,036
Total net debt	140,698	176,508	216,977	256,581	267,631	273,865	279,864	274,078	266,654	261,190
Borrowing headroom/ (shortfall) against limit	101,267	91,564	84,467	66,413	76,281	91,575	99,212	121,526	144,504	168,845

Free funds from operations to debt ratio: The percentage of borrowings balance that is generated in funds from operations each year

Free funds from operations (FFO) to debt ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Total net debt	140,698	176,508	216,977	256,581	267,631	273,865	279,864	274,078	266,654	261,190
Funds from operations	13,836	18,917	24,353	27,324	29,610	32,844	34,797	37,459	39,964	43,066
FFO to debt ratio	9.8%	10.7%	11.2%	10.6%	11.1%	12.0%	12.4%	13.7%	15.0%	16.5%

Commentary on financing sufficiency for water services in 2024-34 LTP

- Net debt to revenue for water services peaks at 397% before reducing to 304% by FY33/34.
- The projected level of investment in the 2024-34 LTP is bankable, with the level of projected borrowings well within expected borrowing limits for a 'WAI + T' Water CCO.
- Projected water services revenues provide sufficient operating cashflow to support borrowing requirements.
- A 'WAI + T' Water CCO that could borrow to 5x operating revenues would provide significant borrowing headroom, and an opportunity to reduce revenue requirements for water services for the proposed level of investment.

Projected debt to revenue by water service

Debt to revenue by water service (\$k)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Drinking water - operating revenue	21,313	23,365	25,470	27,004	29,246	30,099	31,243	33,856	34,653	36,041
Drinking water - net debt	54,466	72,944	92,328	116,893	123,334	129,633	137,923	137,370	138,589	135,946
Drinking water - net debt to operating revenue %	256%	312%	363%	433%	422%	431%	441%	406%	400%	377%
Wastewater - operating revenue	23,903	26,742	30,909	33,502	35,237	37,991	39,851	40,512	42,383	44,156
Wastewater - net debt	85,368	101,230	120,045	134,502	138,835	139,011	136,827	132,180	124,455	123,085
Wastewater - net debt to operating revenue %	357%	379%	388%	401%	394%	366%	343%	326%	294%	279%
Stormwater - operating revenue	3,177	3,507	3,910	4,093	4,299	4,998	4,721	4,753	5,196	5,810
Stormwater - net debt	863	2,334	4,605	5,186	5,462	5,221	5,114	4,528	3,610	2,160
Stormwater - net debt to operating revenue %	27%	67%	118%	127%	127%	104%	108%	95%	69%	37%
Water services - net debt to operating revenue %	291%	329%	360%	397%	389%	375%	369%	346%	324%	304%

Funding source of investment

Investment funding source (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Capital revenues	4,504	853	871	889	905	920	937	954	971	989	12,793
Increase/(decrease) in debt	12,787	27,625	34,409	29,668	10,158	5,288	3,411	(1,609)	(5,534)	1,307	117,510
Funds from operations	27,001	27,102	30,413	37,260	30,502	33,790	37,385	33,282	38,074	36,296	331,106
Total investment funding	44,292	55,581	65,694	67,817	41,565	39,999	41,733	32,626	33,511	38,592	461,409

There is significant scope for 'WAI + T' councils to reevaluate the revenue versus debt financing split of projected investment, given the additional borrowing capability for a 'WAI + T' Water CCO that is funded by the LGFA.

Water services financing - 'WAI + T' consolidated



At a consolidated level, there is significant borrowing headroom against a 5x operating revenue debt limit. Based on projected levels of investment and revenues, a 'WAI + T' CCO would retain unutilised borrowing capacity across the entire LTP period, with this capacity increasing over the last five years due to projected revenue increases.

Remaining borrowing headroom to 5x operating revenues



25



Comparison of 'WAI + T' councils' water services ANNEX 3



Per connection comparison of 'WAI + T' councils (over five years)

'WAI + T' could operate as an aggregation of the four councils' individual water services requirements and maintain regional differences

Under Local Water Done Well **there is no requirement to harmonise prices** across councils where a regional model is progressed.

Each council's water services network, investment requirements and costs of service are unique and different to other 'WAI + T' councils.

We recommend that Wairarapa and Tararua councils look to initially **maintain regional pricing differences that reflect regional differences in the costs of service**.

Operating revenues, costs and investment are shown to enable comparison across the 'WAI + T' councils. A weighted average across 'WAI + T' councils is shown indicatively.

Each council has trade-off decisions to make between levels of revenue, investment and debt financing to strike an appropriate balance for consumers, as part of a 'WAI + T' Water CCO.







27



Further comparison of 'WAI + T' councils on a per connection basis

Household charges are a function of costs of service and levels of investment required

Average water charges are directly impacted by proposed levels of investment, operating expenses and the utilisation of debt financing versus revenue funding of investment. Each council is facing trade-off decisions on these factors to strike the right balance for their communities.

Each council should separately determine the financial projections that should be used for subsequent 'WAI + T' analysis, implementation planning and for Water Services Delivery Plans.

We have provided a separate pack for each council which summarises these trade-off decisions.









Comparing water services financing across 'WAI + T' councils

A 'WAI + T' Water CCO could access sufficient debt financing from LGFA; however, there are regional differences across 'WAI + T' councils

A consolidated 'WAI + T' Water CCO could comfortably access the necessary debt financing required to deliver the proposed levels of investment as set out in the financial projections included in this pack.

'WAI + T' councils may wish to consider trade-offs between levels of revenue and investment, and of debt financing versus revenue funding of investment. When considering these trade-offs each council should aim to:

- Keep debt to revenue at or below 500% of revenues (where possible); and
- Ensure a minimum FFO to debt ratio of 8 -10% is maintained.









'WAI + T' Water CCO: projected consolidated water services financials

ANNEX 4



'WAI + T' financial projections: consolidated funding impact statement

Funding impact statement (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Sources of operating funding											
General rates	810	857	985	1,056	1,125	1,190	1,255	1,232	1,242	1,274	11,026
Targeted rates	43,344	50,167	57,335	61,524	65,584	69,775	72,384	75,664	78,715	82,401	656,893
Subsidies and grants for operating purposes	1,911	541	0	0	0	0	0	0	0	0	2,452
Local authorities fuel tax, fines, infringement fees and other receipts	9	7	6	5	6	6	6	6	6	15	72
Fees and charges	2,319	2,042	1,963	2,014	2,068	2,117	2,170	2,218	2,269	2,317	21,497
Total operating funding	48,393	53,614	60,289	64,599	68,782	73,088	75,815	79,121	82,232	86,007	691,940
Applications of operating funding											
Payments to staff and suppliers	22,085	21,170	20,656	20,473	20,986	21,517	22,099	22,539	23,063	23,627	218,215
Finance costs	5,337	6,164	7,715	9,179	10,327	10,600	10,657	10,622	10,452	10,414	91,467
Internal charges and overheads applied	7,135	7,363	7,565	7,622	7,859	8,127	8,262	8,502	8,752	8,900	80,086
Total applications of operating funding	34,557	34,697	35,936	37,274	39,172	40,244	41,018	41,662	42,267	42,941	389,769
Surplus/(deficit) of operating funding	13,836	18,917	24,353	27,324	29,610	32,844	34,797	37,459	39,964	43,066	302,171
Sources of capital funding											
Subsidies and grants for capital expenditure	3,669	0	0	0	0	0	0	0	0	0	3,669
Development and financial contributions	835	853	871	889	905	920	937	954	971	989	9,124
Increase/(decrease) in debt	12,787	27,625	34,409	29,668	10,158	5,288	3,411	(1,609)	(5,534)	1,307	117,510
Total sources of capital funding	17,291	28,478	35,281	30,556	11,063	6,208	4,348	(656)	(4,563)	2,296	130,303
Applications of capital funding											
Capital expenditure - to meet additional demand	1,070	4,979	1,356	6,077	1,186	2,291	1,259	2,008	346	353	20,925
Capital expenditure - to improve levels of services	14,189	21,805	32,265	25,282	15,966	11,198	9,881	7,000	4,901	11,314	153,801
Capital expenditure - to replace existing assets	29,033	28,797	32,073	36,458	24,413	26,510	30,593	23,618	28,264	26,925	286,683
Increase/(decrease) in reserves	(5,561)	(8,185)	(6,064)	(9,933)	(891)	(945)	(2,593)	4,180	1,889	6,779	(21,324)
Increase/(decrease) in investments	(7,600)	0	0	0	0	0	0	0	0	0	(7,600)
Total applications of capital funding	31,131	47,396	59,630	57,884	40,674	39,054	39,140	36,806	35,400	45,371	432,485
Surplus/(deficit) of capital funding	(13,840)	(18,917)	(24,349)	(27,327)	(29,611)	(32,845)	(34,792)	(37,462)	(39,963)	(43,075)	(302,182)
Funding balance	(4)	0	4	(3)	(1)	(1)	5	(3)	1	(9)	(11)



'WAI + T' financial projections: consolidated P&L and cashflows

Statement of comprehensive revenue and expense (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Operating revenue	48,393	53,614	60,289	64,599	68,782	73,088	75,815	79,121	82,232	86,007
Other revenue	4,504	853	871	889	905	920	937	954	971	989
Total revenue	52,897	54,468	61,160	65,487	69,688	74,008	76,752	80,074	83,203	86,996
Operating expenses	22,085	21,170	20,656	20,473	20,986	21,517	22,099	22,539	23,063	23,627
Finance costs	5,337	6,164	7,715	9,179	10,327	10,600	10,657	10,622	10,452	10,414
Overheads and support costs	7,135	7,363	7,565	7,622	7,859	8,127	8,262	8,502	8,752	8,900
Depreciation & amortisation	16,688	17,611	19,220	20,424	21,310	22,849	23,644	24,089	24,949	25,736
Total expenses	51,245	52,308	55,156	57,698	60,483	63,092	64,662	65,751	67,217	68,678
Net surplus / (deficit)	1,652	2,160	6,004	7,789	9,205	10,916	12,090	14,323	15,986	18,318
Revaluation of infrastructure assets	13,837	43,118	4,941	22,792	32,074	15,682	13,529	42,532	5,403	24,328
Total comprehensive income	15,489	45,278	10,945	30,581	41,279	26,598	25,619	56,855	21,389	42,647
Cash surplus / (deficit) from operations (excl depreciation)	18,340	19,771	25,224	28,213	30,515	33,765	35,734	38,412	40,935	44,055

Statement of cashflows (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Cashflows from operating activities										
Cash surplus / (deficit) from operations	18,340	19,771	25,224	28,213	30,515	33,765	35,734	38,412	40,935	44,055
Net cashflows from operating activities	18,340	19,771	25,224	28,213	30,515	33,765	35,734	38,412	40,935	44,055
Cashflows from investment activities										
Capital expenditure	(44,292)	(55,581)	(65,694)	(67,817)	(41,565)	(39,999)	(41,733)	(32,626)	(33,511)	(38,592)
Net cashflows from investment activities	(44,292)	(55,581)	(65,694)	(67,817)	(41,565)	(39,999)	(41,733)	(32,626)	(33,511)	(38,592)
Cashflows from financing activities										
Movements in external debt	12,787	27,625	34,409	29,668	10,158	5,288	3,411	(1,609)	(5,534)	1,307
Movements in internal debt	0	0	0	0	0	0	0	0	0	0
Net cashflows from financing activities	12,787	27,625	34,409	29,668	10,158	5,288	3,411	(1,609)	(5,534)	1,307
Net increase/(decrease) in cash and cash equivalents	(13,165)	(8,185)	(6,060)	(9,936)	(892)	(946)	(2,588)	4,177	1,890	6,770
Cash and cash equivalents at beginning of year	(14,845)	(28,010)	(36,195)	(42,255)	(52,191)	(53,083)	(54,029)	(56,617)	(52,440)	(50,550)
Cash and cash equivalents at end of year	(28,010)	(36,195)	(42,255)	(52,191)	(53,083)	(54,029)	(56,617)	(52,440)	(50,550)	(43,780)

Negative projected cash balances occur due to internal borrowings arrangements and cash shortfalls set out in water services funding impact statements (through the movements in reserves line). These negative projected cash balances are included in 'net debt' analysis within this pack. 'WAI + T' councils should rebalance external borrowings, internal borrowings and cash, by adjusting projected capital movements to ensure that there is sufficient positive working capital included in a submitted Water Services Delivery Plan.



'WAI + T' financial projections: consolidated balance sheet

Statement of financial position (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Assets										
Cash and cash equivalents	(28,010)	(36,195)	(42,255)	(52,191)	(53,083)	(54,029)	(56,617)	(52,440)	(50,550)	(43,780)
Infrastructure assets	655,674	736,762	788,177	858,362	910,691	943,523	975,141	1,026,210	1,040,174	1,077,358
Total assets	627,664	700,567	745,922	806,171	857,608	889,494	918,524	973,770	989,625	1,033,578
Liabilities										
External borrowings	112,688	140,313	174,722	204,390	214,548	219,836	223,247	221,638	216,104	217,411
Internal borrowings	0	0	0	0	0	0	0	0	0	0
Total liabilities	112,688	140,313	174,722	204,390	214,548	219,836	223,247	221,638	216,104	217,411
Net assets	514,976	560,254	571,199	601,781	643,060	669,658	695,277	752,132	773,521	816,168
Equity										
Revaluation reserve	379,679	422,797	427,738	450,530	482,604	498,286	511,815	554,348	559,751	584,079
Other reserves	135,297	137,457	143,461	151,250	160,455	171,371	183,461	197,784	213,770	232,088
Total equity	514,976	560,254	571,199	601,781	643,059	669,657	695,276	752,132	773,521	816,167

Negative projected cash balances occur due to internal borrowings arrangements and cash shortfalls set out in water services funding impact statements (through the movements in reserves line). These negative projected cash balances are included in 'net debt' analysis within this pack.

'WAI + T' councils should rebalance external borrowings, internal borrowings and cash, by adjusting projected capital movements to ensure that there is sufficient positive working capital included in a submitted Water Services Delivery Plan.



Wairarapa and Tararua Water Done Well MASTERTON DISTRICT COUNCIL

Assessment of the financial sustainability of Masterton District Council's water services delivery and considerations for potential joint Wairarapa/Tararua water services CCO

11 November 2024

This document has been prepared to provide information to Masterton District Council on the financial sustainability of water services provision (as indicatively assessed against the requirements for Water Services Delivery Plans), and to provide information relating to a potential Joint Wairarapa/Tararua water services CCO.

The Department of Internal Affairs has relied on information provided by Masterton District Council in the development of the analysis and guidance included in this report. This guidance is not legal advice; and is intended to support Masterton District Council's decision-making requirements under Local Water Done Well.

Te Kāwanatanga o Aotearoa New Zealand Government



Te Tari Taiwhenua Internal Affairs



Wairarapa and Tararua Joint Council Project

Carterton District Council, Masterton District Council, South Wairarapa District Council and Tararua District Council are investigating a joint arrangement under Local Water Done Well (referred to as 'WAI + T').

The Council Grouping approached the Department of Internal Affairs ('The Department') for analytical and guidance support to investigate the financial sustainability and viability of status quo in-house water services delivery, and that of potential new joint delivery arrangements for water services.

The Department has worked with each participating council to confirm baseline positions and provide guidance on the financial sustainability of status quo water services delivery. A report on the viability of a potential 'WAI + T' Water CCO has been developed and provided to Wairarapa and Tararua councils (titled *Wairarapa and Tararua Water Done Well*, 1 November 2024).

This pack has been developed as an addendum report which provides further analysis and guidance on tradeoffs and benefits that could be obtained for Masterton District Council and Masterton communities through establishing a 'WAI + T' Water CCO.

A similar report has been developed and provided to the other Wairarapa and Tararua councils.

The analysis within this pack should be considered alongside the Wairarapa and Tararua Water Done Well report.



A 'WAI + T' Water CCO would be financially viable

Our analysis on the financial information provided by Wairarapa and Tararua councils demonstrates that **a 'WAI + T' Water CCO would be financially sustainable** at LTP projected levels of investment, revenues and debt financing.

A 'WAI + T' Water CCO would also meet the financial sustainability requirements of Water Services Delivery Plans.

A 'WAI + T' Water CCO will:

- Be **able to access additional debt financing from LGFA** up to the equivalent of 500% of operating revenues (a significant uplift against what Wairarapa and Tararua councils can achieve on a stand-alone basis).
- Improve the financial resilience for water services delivery across the Wairarapa and Tararua.
- Provide the ability to fund the required levels of water services investment, with scope to increase and/or accelerate proposed investment.
- Provide the opportunity to deliver **lower water charges to Wairarapa and Tararua consumers** than what councils could deliver on a stand-alone in-house basis.
- Create new borrowing headroom for owning councils if water services revenues and debt are transferred to 'WAI + T' Water CCO. This new borrowing headroom could be used to fund non-water investment that is projected to be revenue funded, leading to a reduction in projected rates increases.
- Enable an **efficient financing strategy for water services** to be developed and implemented.



Further analysis is required with trade-offs to consider for each council to unlock the benefits of Local Water Done Well

Based on the current set of financial projections for each council, a **combined 'WAI + T' Water CCO would be financially sustainable**.

Wairarapa and Tararua councils should however **continue to investigate their water services financial projections and financial strategies to realise the full set of benefits** that Local Water Done Well and the LGFA financing solution for water CCOs provide.

This report sets out the considerations and trade-offs to be considered by Masterton District Council.

Each council should look to **strike an effective balance between levels of investment, debt financing and affordability** for consumers when developing a Water Services Delivery Plan, confirming financial projections and developing implementation plans.

There is significant scope for debt financing to be more effectively utilised to increase and/or accelerate investment, or to reduce charges for consumers.

Each council should also review the projected water services investment included in their 2024-34 LTP (or other council projections) against the minimum requirements required in Water Services Delivery Plans guidance and look to identify any potential savings or efficiencies that could be gained to reduce the total investment requirement.

Savings to investment programmes could be identified through:

- Wairarapa and Tararua councils working together on joint investment programmes, including identifying new opportunities to deliver regional solutions at lower cost, rephasing of investment, or developing efficient joint procurement approaches to lower costs; and/or
- Working through the impact that expected changes to regulatory standards signalled by the Government will have on water services investment requirements.



The financial sustainability of Masterton District Council's water services and opportunities under a 'WAI + T' Water CCO

This pack includes analysis and guidance on:

DISTRICT COUNCIL

- Financial sustainability considerations for Masterton District Council's status quo in-house water services delivery based on 2024-34 LTP information.
- An indicative assessment of LTP information against the financial sustainability measures in Water Services Delivery Plans.
- Trade-offs and opportunities from the potential establishment of a 'WAI + T' water services CCO that can access additional debt financing (up to 5x revenues) through LGFA, to the benefit of Masterton communities .
- The potential impact on Masterton District Council's financials if water services were to be structurally separated from other council business.

Key conclusions of analysis for Masterton District Council

Financial sustainability review of status quo water services delivery for Masterton District Council	A 'WAI + T' water CCO would be viable	Trade-offs and opportunities for Masterton District Council and communities under 'WAI + T'
No material financial sustainability issues identified from review of 2024-34 LTP for water services or all-of-council business. LTP projections for water services would likely meet the	 A 'WAI + T' Water CCO would be financially sustainable at LTP projected levels of investment, revenues and debt financing. A 'WAI + T' Water CCO would also likely meet the financial sustainability requirements of Water Services Delivery Plans. 	 The transfer of MDC's water services into a joint CCO could: Create \$42 million of initial borrowing headroom for water services delivery to Masterton communities; and Create \$30 million of borrowing headroom for MDC.
Subject to Masterton District Council's review of projected investment against the requirements of Water Services Delivery Plans, the proposed level of investment would likely meet the 'investment sufficiency' test . Projected borrowing requirements for water services and at an all-of-council level are financeable, meaning it is likely	 A 'WAI + T' Water CCO will: Be able to access additional debt financing from LGFA (500% of operating revenues). Improve financial resilience for water services delivery. Provide the ability to fund the required levels of water services investment, with scope to increase and/or accelerate proposed investment. 	 The additional capacity for water services through a joint CCO could: Be retained for future requirements (i.e., with no change to LTP projected revenue or investment requirements); or Enable \$64 million more capital investment over the LTP period at LTP projected revenues (+68%); or
LTP projections for water services would meet the 'financing sufficiency' test. There is significant scope to adjust debt and revenue profiles if a joint water services CCO is established that can borrow up to 5x operating revenues.	 Result in lower water charges to Masterton consumers than what MDC could deliver on a stand-alone in-house basis, if debt financing is appropriately utilised to fund investment. Create new borrowing headroom for MDC. Enable an efficient financing strategy for water services to be developed and implemented. 	 Eliminate 15% of projected rates requirements for water services over the LTP period (\$28 million), generating savings of \$300 per household per year; or Be applied to some combination of improved financial resiliency, increased investment and reduced prices.



Opportunities for Masterton District Council as part of 'WAI + T'

Additional capital investment could be funded at LTP projected revenues

The Long-Term Plan proposes \$94 million of capital investment over ten years.

We have run a scenario to test the upper boundary of benefits achievable under a water services CCO, through determining how much additional capital investment could be theoretically funded assuming current project revenues from the LTP.

This scenario:

- Keeps projected revenues and operating expenses in line with LTP.
- Increases the amount of capital investment that could be delivered, where debt to revenue is maintained under a limit of 500% to FY33/34.
- · Recalculates interest costs and debt balances based on these assumptions.
- · Assumes no uplift for the current FY24/25 year.

Masterton District Council could theoretically **increase capital investment by \$64 million (68%)** over the LTP period, based on current projected water services revenues and increasing borrowings up towards a 500% limit. **This additional fundable investment is shown below in dark purple and represents potential investment uplift headroom.** Alternatively, Masterton District Council could theoretically finance its entire LTP capex requirement of \$94 million by FY28/29 – an acceleration 5 years (or twice as fast).

Projected investment in water services	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
2024-34 Long Term Plan projected capital investment (\$000)	8,250	14,373	14,517	12,779	7,047	6,723	6,210	8,358	7,828	7,927	94,012
Capital investment financeable under LTP projected revenues (\$000)	8,250	25,153	25,405	22,363	12,332	11,765	10,868	14,627	13,699	13,872	158,334
Extra capital investment financeable (\$000)	0	10,780	10,888	9,584	5,285	5,042	4,658	6,269	5,871	5,945	64,322
Extra capital investment financeable (%)	0%	75%	75%	75%	75%	75%	75%	75%	75%	75%	68%



Alternatively, water revenues (and charges) could be reduced against LTP

The additional borrowing headroom that would be created from establishing a water services CCO could alternatively be used to debt-finance capital investment and reduce the rates (or charges) required to fund the investment over the LTP period.

We have run a scenario that delivers LTP investment, increases the amount of debt financing, and reduces revenues to a level sufficient to cover cash costs and support borrowing requirements (assuming minimum operating cashflow requirements set to 8% of gross debt).

Masterton District Council could theoretically reduce projected rates requirements by 15% for water services over the LTP period (\$28 million). This would save each household approximately \$300 per year (\$2,966 total savings per household over LTP period).

Average charge per connection including GST – LTP v more debt financing scenario

Average charge per connection including GST	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Tota	al
Average charge - 2024-34 Long Term Plan	1,693	1,763	1,902	1,956	2,037	2,109	2,126	2,135	2,194	2,238	20	0,153
Average - reset with additional debt financing of capex	1,693	1,410	1,595	1,706	1,745	1,769	1,773	1,806	1,835	1,854	17	7,187
Projected increase - 2024-34 Long Term Plan	9.3%	4.1%	7.9%	2.9%	4.1%	3.5%	0.8%	0.5%	2.7%	2.0%		
Projected increase - reset with additional debt financing of capex	9.3%	-16.7%	13.1%	7.0%	2.3%	1.4%	0.2%	1.9%	1.6%	1.1%		
Savings for each household	0	353	307	250	292	339	353	329	359	384	1	2,966
Savings for each household (%)	0%	20%	16%	13%	14%	16%	17%	15%	16%	17%		15%



Water rates - additional debt financing of capex (\$m) Water rates - 2024-34 Long Term Plan (\$m) — Potential revenue reduction achievable (%

Comparison of charges: LTP v more debt financing scenario

Revenue requirements for water services (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Water rates - 2024-34 Long Term Plan	15,016	15,786	17,197	17,856	18,786	19,642	19,999	20,293	21,054	21,697	187,32
Water rates - reset with additional debt financing of capex	15,016	12,634	14,435	15,599	16,106	16,488	16,682	17,163	17,605	17,970	159,69
Potential water rates reduction achievable	0	3,152	2,762	2,257	2,680	3,154	3,317	3,130	3,449	3,727	27,62
Potential water rates reduction achievable (%)	0%	20%	16%	13%	14%	16%	17%	15%	16%	17%	155
Savings for each household (\$)	0	353	307	250	292	339	353	329	359	384	2,96
Metrics	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	
Rates increase	10.4%	-15.9%	14.3%	8.1%	3.3%	2.4%	1.2%	2.9%	2.6%	2.1%	
Operating revenue increase	12.5%	-16.2%	12.3%	7.7%	3.2%	2.4%	1.3%	2.8%	2.5%	2.1%	
Operating expenses increase	18.7%	-2.0%	3.1%	2.6%	2.7%	3.3%	1.8%	2.9%	2.6%	1.9%	
Net debt to operating revenue	243.9%	364.7%	386.4%	402.1%	397.6%	394.0%	391.5%	393.7%	393.1%	393.9%	

6



Impact on Masterton District Council from transferring water services to a CCO

Masterton District Council analysis (\$m)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Including water services (status quo)										
Operating revenue	83	85	82	83	90	92	92	97	99	99
Net debt	51	67	90	103	93	81	67	56	43	26
Net debt to operating revenue	62%	79%	110%	124%	104%	88%	73%	57%	43%	26%
Excluding water services										
Operating revenue	66	68	64	64	70	71	71	75	77	76
Net debt	11	21	37	46	39	30	20	11	2	(11)
Net debt to operating revenue	16%	30%	58%	72%	55%	42%	28%	15%	3%	-14%
Debt headroom created from excluding three waters	30	33	33	33	34	33	31	32	31	30

Impact on borrowing headroom if water services are transferred to a water services CCO

- Masterton District Council would benefit from the creation of \$30 million in debt headroom at the parent council level if water services are transferred to a • 'WAI + T' Water CCO. This new borrowing headroom could be used to fund non-water investment that is projected to be revenue funded, with a corresponding reduction in non-water rates requirements.
- This would provide significant borrowing headroom for council's other activities and improve financial resilience, reducing net debt to operating revenue • from 62% to 16% for FY24/25; and from a peak of 124% to 72% in FY27/28.



All of council financing (excluding water services)



Projected council net debt to operating revenue (excluding water services)

Comparison of Masterton District Council LTP indicative water charges against GravelRoad Wellington/Wairarapa outputs



Masterton District Council – charges excluding GST	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Average charge (MDC, LTP 2024-34) - \$	1,472	1,533	1,654	1,701	1,771	1,834	1,848	1,857	1,908	1,946
Average charge (MDC, more debt financing) - \$	1,472	1,226	1,387	1,484	1,517	1,539	1,542	1,571	1,595	1,612
GraveIroad 3x Council Water Entity scenario - \$	1,909	2,058	2,223	2,423	2,641	2,878	3,137	3,420	3,728	4,063
Savings per connection (MDC, more debt financing) - \$	0	307	267	217	254	295	307	286	313	334
Savings per connection (MDC, more debt financing) - %	0%	20%	16%	13%	14%	16%	17%	15%	16%	17%
Savings per connection (against GravelRoad scenario) - \$	437	832	836	939	1,123	1,340	1,596	1,849	2,132	2,451
Savings per connection (against GravelRoad scenario) - %	23%	40%	38%	39%	43%	47%	51%	54%	57%	60%

MDC's 2024-34 LTP shows average charges for water services increasing from \$1,472 to FY24/25 to \$1,946 in FY33/34 (excluding GST, noting these are average calculated estimates based on information provided by MDC).

For the LTP level of proposed investment, our analysis suggests that projected charges could reduce against LTP projections through additional use of the debt financing capacity that would be available to a Wairarapa/Tararua water services CCO funded by LGFA.

Masterton District Council provided the Department with analysis completed by GravelRoad for the 10 council Wellington/Wairarapa Grouping and a hypothetical Wairarapa CCO, using network condition modelling to imply capital investment requirements. The GravelRoad modelling assumes a much higher capital investment requirement than is outlined in your LTP.

It is worth noting that the proposed level of investment included in GravelRoad modelling outputs has not been determined by specifying the individual projects and other works that Masterton District Council needs to undertake on your water services infrastructure. The Department's view is that councils are best placed to determine the level of investment required through the identification of the capital works / projects required, and consequently we view investment requirements in your LTP as being the most reliable data set available for this analysis and any council decisions to be made around financial sustainability and delivery model options analysis.

Given the relative difference in projected charges between the scenarios presented by the Department and GravelRoad, Masterton District Council has significant scope to increase investment (if required over time) while keeping charges significantly lower than what is presented in the GravelRoad Wairarapa scenario.



GravelRoad output – 'Regional Water Entity' (10 council grouping)





Masterton District Council: Water Services in 2024-34 Long Term Plan

Considerations for Local Water Done Well from review of LTP information

- No material financial sustainability issues identified from review of 2024-34 LTP for water services or all-of-council business.
- Significant scope for adjusting debt and revenue profile under a Wairarapa / Tararua water services CCO that can borrow up to 5x operating revenues.
- Projecting relatively low debt to revenue under LTP (compared to LGFA announced limit for a water services CCO) and relatively high funds from operations which suggests that charges to consumers could potentially be lowered if a CCO model is pursued.
- Consideration should be given to resetting revenue and debt requirements over ten years to 'capture' the benefit of amalgamation in Masterton District Council's water services numbers before 'WAI + T' implementation modelling is undertaken.
- The indicative projected financial statements for water services demonstrate negative cash reserves, which are resulting from the capital cash outflows for reserves and investments in the funding impact statement. This should be rectified before 'WAI + T' implementation modelling is undertaken.

Funding impact statement (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Sources of operating funding											
Targeted rates	15,016	15,786	17,197	17,856	18,786	19,642	19,999	20,293	21,054	21,697	187,326
Local authorities fuel tax, fines, infringement fees and other receipts	6	5	5	5	6	6	6	6	6	6	57
Fees and charges	1,490	1,191	1,085	1,114	1,143	1,171	1,199	1,226	1,252	1,279	12,150
Total operating funding	16,512	16,982	18,287	18,975	19,935	20,819	21,204	21,525	22,312	22,982	199,533
Applications of operating funding											
Payments to staff and suppliers	4,837	4,559	4,661	4,784	4,885	5,016	5,108	5,226	5,327	5,442	49,845
Finance costs	2,003	1,883	2,076	2,309	2,555	2,405	2,189	1,967	1,854	1,702	20,943
Internal charges and overheads applied	2,868	2,990	3,120	3,201	3,315	3,457	3,517	3,646	3,774	3,832	33,720
Total applications of operating funding	9,708	9,432	9,857	10,294	10,755	10,878	10,814	10,839	10,955	10,976	104,508
Surplus/(deficit) of operating funding	6,804	7,550	8,430	8,681	9,180	9,941	10,390	10,686	11,357	12,006	95,025
Sources of capital funding											
Subsidies and grants for capital expenditure	1,270	0	0	0	0	0	0	0	0	0	1,270
Development and financial contributions	170	170	170	170	170	170	170	170	170	170	1,700
Increase/(decrease) in debt	(8,851)	2,687	4,209	2,931	(3,046)	(4,428)	(4,622)	(2,318)	(3,281)	(3,218)	(19,937)
Total sources of capital funding	(7,411)	2,857	4,379	3,101	(2,876)	(4,258)	(4,452)	(2,148)	(3,111)	(3,048)	(16,967)
Applications of capital funding											
Capital expenditure - to meet additional demand	0	2,712	0	0	0	0	0	0	0	0	2,712
Capital expenditure - to improve levels of services	200	4,744	9,044	7,496	470	482	493	2,520	647	1,898	27,994
Capital expenditure - to replace existing assets	8,050	6,917	5,473	5,283	6,577	6,241	5,717	5,838	7,181	6,029	63,306
Increase/(decrease) in reserves	(1,255)	(3,965)	(1,710)	(995)	(744)	(1,040)	(275)	180	416	1,035	(8,353)
Increase/(decrease) in investments	(7,600)	0	0	0	0	0	0	0	0	0	(7,600)
Total applications of capital funding	(605)	10,408	12,807	11,784	6,303	5,683	5,935	8,538	8,244	8,962	78,059
Surplus/(deficit) of capital funding	(6,806)	(7,551)	(8,428)	(8,683)	(9,179)	(9,941)	(10,387)	(10,686)	(11,355)	(12,010)	(95,026)
Funding balance	(2)	(1)	2	(2)	1	0	3	0	2	(4)	(1)

Water services funding impact statement: 2024-34 LTP

Water services metrics: 2024-34 LTP

Key financial metrics for water services										
Metrics	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Rates increase	10.4%	5.1%	8.9%	3.8%	5.2%	4.6%	1.8%	1.5%	3.8%	3.1%
Operating revenue increase	12.5%	2.8%	7.7%	3.8%	5.1%	4.4%	1.8%	1.5%	3.7%	3.0%
Operating expenses increase	18.7%	-2.0%	3.1%	2.6%	2.7%	3.3%	1.8%	2.9%	2.6%	1.9%
Net debt to operating revenue	243.9%	276.3%	289.0%	299.2%	273.2%	245.4%	220.4%	205.5%	181.7%	157.9%
FFO to net debt	16.9%	16.1%	16.0%	15.3%	16.9%	19.5%	22.2%	24.2%	28.0%	33.1%

Water Services Projected Financial Statements: 2024-34 LTP (\$k)

Statement of comprehensive revenue and expense (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Operating revenue	16,512	16,982	18,287	18,975	19,935	20,819	21,204	21,525	22,312	22,982
Other revenue	1,440	170	170	170	170	170	170	170	170	170
Total revenue	17,952	17,152	18,457	19,145	20,105	20,989	21,374	21,695	22,482	23,152
Operating expenses	4,837	4,559	4,661	4,784	4,885	5,016	5,108	5,226	5,327	5,442
Finance costs	2,003	1,883	2,076	2,309	2,555	2,405	2,189	1,967	1,854	1,702
Overheads and support costs	2,868	2,990	3,120	3,201	3,315	3,457	3,517	3,646	3,774	3,832
Depreciation & amortisation	6,973	7,071	8,032	8,195	8,522	9,310	9,422	9,521	10,096	10,187
Total expenses	16,681	16,503	17,889	18,489	19,277	20,188	20,236	20,360	21,051	21,163
Net surplus / (deficit)	1,271	649	568	656	828	801	1,138	1,335	1,431	1,989
Revaluation of infrastructure assets	0	29,609	0	0	26,691	0	0	26,567	0	0
Total comprehensive income	1,271	30,258	568	656	27,519	801	1,138	27,902	1,431	1,989
Cash surplus / (deficit) from operations (excl depreciation)	8,244	7,720	8,600	8,851	9,350	10,111	10,560	10,856	11,527	12,176
Statement of cashflours (\$000)	EV24/2E	EV 25 /26	EV26/27	EV 27/29	EV 29/20	EV 20/20	EV20/21	EV 21 /22	EV22/22	EV22/24
Cashflows from operating activities	1124/23	1123/20	1120/27	1127/20	1120/25	1125/30	1130/31	1131/32	1132/33	P133/34
Cash surplus / (deficit) from operations	8,244	7,720	8,600	8,851	9,350	10,111	10,560	10,856	11,527	12,176
Net cashflows from operating activities	8,244	7,720	8,600	8,851	9,350	10,111	10,560	10,856	11,527	12,176
Cashflows from investment activities										
Capital expenditure	(8,250)	(14,373)	(14,517)	(12,779)	(7,047)	(6,723)	(6,210)	(8,358)	(7,828)	(7,927)
Net cashflows from investment activities	(8,250)	(14,373)	(14,517)	(12,779)	(7,047)	(6,723)	(6,210)	(8,358)	(7,828)	(7,927)
Cashflows from financing activities										
New borrowings	(8,851)	2,687	4,209	2,931	(3,046)	(4,428)	(4,622)	(2,318)	(3,281)	(3,218)
Net cashflows from financing activities	(8,851)	2,687	4,209	2,931	(3,046)	(4,428)	(4,622)	(2,318)	(3,281)	(3,218)
Net increase/(decrease) in cash and cash equivalents	(8,857)	(3,966)	(1,708)	(997)	(743)	(1,040)	(272)	180	418	1,031
Cash and cash equivalents at beginning of year	4,914	(3,943)	(7,909)	(9,617)	(10,614)	(11,357)	(12,397)	(12,669)	(12,489)	(12,071)
Cash and cash equivalents at end of year	(3,943)	(7,909)	(9,617)	(10,614)	(11,357)	(12,397)	(12,669)	(12,489)	(12,071)	(11,040)
Statement of financial position (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Assets	(2.042)	(7.000)	(0.617)	(10 614)	(11 257)	(12 207)	(12 660)	(12.490)	(12.071)	(11.040)
Infractaucture accente	246 094	792 905	200 290	204 064	220 190	217 502	214 291	220 795	227 517	225 257
Total assets	243,041	275,986	280,763	284,350	308.823	305.196	301.712	327,296	325,446	324.217
Liabilities										
Borrowings - non-current portion	36.330	39.017	43.226	46.157	43.111	38.683	34.061	31.743	28.462	25.244
Total liabilities	36,330	39,017	43,226	46,157	43,111	38,683	34,061	31,743	28,462	25,244
Net assets	206,711	236,969	237,537	238,193	265,712	266,513	267,651	295,553	296,984	298,973
Equity										
Revaluation reserve	107,632	137,241	137,241	137,241	163,932	163,932	163,932	190,499	190,499	190,499
Other reserves	99,079	99,728	100,296	100,952	101,780	102,581	103,719	105,054	106,485	108,474
Total equity	206,711	236,969	237,537	238,193	265,712	266,513	267,651	295,553	296,984	298,973

DISTRICT COUNCIL



Masterton District Council: Revenue sufficiency

Projected statement of comprehensive revenue and expense

Statement of comprehensive revenue and expense (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Operating revenue	16,512	16,982	18,287	18,975	19,935	20,819	21,204	21,525	22,312	22,982
Other revenue	1,440	170	170	170	170	170	170	170	170	170
Total revenue	17,952	17,152	18,457	19,145	20,105	20,989	21,374	21,695	22,482	23,152
Operating expenses	4,837	4,559	4,661	4,784	4,885	5,016	5,108	5,226	5,327	5,442
Finance costs	2,003	1,883	2,076	2,309	2,555	2,405	2,189	1,967	1,854	1,702
Overheads and support costs	2,868	2,990	3,120	3,201	3,315	3,457	3,517	3,646	3,774	3,832
Depreciation & amortisation	6,973	7,071	8,032	8,195	8,522	9,310	9,422	9,521	10,096	10,187
Total expenses	16,681	16,503	17,889	18,489	19,277	20,188	20,236	20,360	21,051	21,163
Net surplus / (deficit)	1,271	649	568	656	828	801	1,138	1,335	1,431	1,989
Revaluation of infrastructure assets	0	29,609	0	0	26,691	0	0	26,567	0	0
Total comprehensive income	1,271	30,258	568	656	27,519	801	1,138	27,902	1,431	1,989
Cash surplus / (deficit) from operations (excl depreciation)	8,244	7,720	8,600	8,851	9,350	10,111	10,560	10,856	11,527	12,176

Key water services metrics

Metrics	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Rates increase	10.4%	5.1%	8.9%	3.8%	5.2%	4.6%	1.8%	1.5%	3.8%	3.1%
Operating revenue increase	12.5%	2.8%	7.7%	3.8%	5.1%	4.4%	1.8%	1.5%	3.7%	3.0%
Operating expenses increase	18.7%	-2.0%	3.1%	2.6%	2.7%	3.3%	1.8%	2.9%	2.6%	1.9%
Net debt to operating revenue	243.9%	276.3%	289.0%	299.2%	273.2%	245.4%	220.4%	205.5%	181.7%	157.9%
FFO to net debt	16.9%	16.1%	16.0%	15.3%	16.9%	19.5%	22.2%	24.2%	28.0%	33.1%

Commentary on water services revenue and expenses

- The 2024-34 LTP shows a 12.5% uplift in water services revenues for FY24/25, which is due to an 18.7% increase in operating expenses.
- For the remaining nine years of the LTP period, operating revenue and expense increases are projected to be more moderate.
- The projected levels of water services revenues are sufficient for the level of investment and expenditure proposed, and fully cover all operating costs including depreciation.
- In the last five years of the LTP period, water services revenues generate cashflows to fund debt repayments, which reduces debt to revenue for water services to 158% in FY33/34 from a peak of 299% in FY27/28.
- Water services are projected to provide funds from operations ('FFO', i.e., operating cashflows) of \$8.2 million in FY24/25, which represents 17% of water services debt.
- Due to projected debt repayments, free funds from operations increase to \$12.2 million in FY33/34, which represent 33% of projected FY33/34 water services debt.
- A Wairarapa / Tararua water services CCO that borrows through LGFA would be likely required to maintain a minimum FFO to debt ratio of 8-10%.
- This means that there is significant scope for Masterton District Council to reevaluate the level of water services revenue required.
- Establishing a water CCO that could borrow to 5x operating revenues would provide an opportunity to potentially reduce revenue requirements for water services.

Revenue sufficiency performance measures

Average charge per connection including GST

Average charge per connection including GST	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Average drinking water bill (including GST)	615	626	701	743	815	849	855	858	876	895
Average wastewater bill (including GST)	948	994	1,038	1,025	1,032	1,058	1,067	1,075	1,106	1,130
Average stormwater bill (including GST)	130	143	163	188	190	202	203	202	213	213
Average charge per connection including GST	1,693	1,763	1,902	1,956	2,037	2,109	2,126	2,135	2,194	2,238
Projected increase	9.3%	4.1%	7.9%	2.9%	4.1%	3.5%	0.8%	0.5%	2.7%	2.0%

Operating surplus ratio: does operating revenue cover operating costs including depreciation?

operating surplus ratio, aves operating reven	operating surprise ratio does operating revenue cover operating consistence and a second s												
Operating surplus ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total		
Operating surplus/(deficit) excluding capital revenues	(169)	479	398	486	658	631	968	1,165	1,261	1,819	7,696		
Total operating revenue	16,512	16,982	18,287	18,975	19,935	20,819	21,204	21,525	22,312	22,982	199,533		
Operating surplus ratio	(1.0%)	2.8%	2.2%	2.6%	3.3%	3.0%	4.6%	5.4%	5.7%	7.9%	3.9%		

Operating cash ratio: what much cash is generated from operations?

operating cash ratio. Inder tash o gene	ratea point	operations.									
Operating cash ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Operating surplus/(deficit) + depreciation + interest costs - capital revenue	8,807	9,433	10,506	10,990	11,735	12,346	12,579	12,653	13,211	13,708	115,968
Total operating revenue	16,512	16,982	18,287	18,975	19,935	20,819	21,204	21,525	22,312	22,982	199,533
Operating cash ratio	53.3%	55.5%	57.5%	57.9%	58.9%	59.3%	59.3%	58.8%	59.2%	59.6%	58.1%

Commentary on revenue sufficiency for water services in 2024-34 LTP

- Projected operating revenues cover projected operating costs including depreciation.
- Funds from operations are higher than what would be required for a combined water services CCO funded by LGFA.
- · LTP projections for water services would likely meet the 'revenue sufficiency' test.



Projected water services revenue and expenses

10



Masterton District Council: Investment sufficiency

Projected water services investment

Projected investment in water services (\$000)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Drinking water											
Capital expenditure - to meet additional demand	0	863	0	0	0	0	0	0	0	0	863
Capital expenditure - to improve levels of services	200	3,656	7,929	6,870	0	0	0	0	26	0	18,681
Capital expenditure - to replace existing assets	5,030	4,373	2,225	2,234	3,478	3,066	2,395	2,516	3,788	2,562	31,667
Total projected investment for drinking water	5,230	8,892	10,154	9,104	3,478	3,066	2,395	2,516	3,814	2,562	51,211
Wastewater											
Capital expenditure - to meet additional demand	0	1,414	0	0	0	0	0	0	0	0	1,414
Capital expenditure - to improve levels of services	0	0	0	0	0	0	0	2,520	621	1,898	5,039
Capital expenditure - to replace existing assets	2,710	1,891	2,161	2,333	2,394	2,453	2,583	2,566	2,621	2,678	24,390
Total projected investment for wastewater	2,710	3,305	2,161	2,333	2,394	2,453	2,583	5,086	3,242	4,576	30,843
Stormwater											
Capital expenditure - to meet additional demand	0	435	0	0	0	0	0	0	0	0	435
Capital expenditure - to improve levels of services	0	1,088	1,115	626	470	482	493	0	0	0	4,274
Capital expenditure - to replace existing assets	310	653	1,087	716	705	722	739	756	772	789	7,249
Total projected investment for stormwater	310	2,176	2,202	1,342	1,175	1,204	1,232	756	772	789	11,958
Total projected investment in water services	8,250	14,373	14,517	12,779	7,047	6,723	6,210	8,358	7,828	7,927	94,012

Funding sources of projected investment

Investment funding source	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Capital expenditure - to meet additional demand	0	2,712	0	0	0	0	0	0	0	0	2,712
Capital expenditure - to improve levels of services	200	4,744	9,044	7,496	470	482	493	2,520	647	1,898	27,994
Capital expenditure - to replace existing assets	8,050	6,917	5,473	5,283	6,577	6,241	5,717	5,838	7,181	6,029	63,306
Total investment	8,250	14,373	14,517	12,779	7,047	6,723	6,210	8,358	7,828	7,927	94,012
Capital revenues	1,440	170	170	170	170	170	170	170	170	170	2,970
Increase/(decrease) in debt	(8,851)	2,687	4,209	2,931	(3,046)	(4,428)	(4,622)	(2,318)	(3,281)	(3,218)	(19,937)
Funds from operations	15,661	11,516	10,138	9,678	9,923	10,981	10,662	10,506	10,939	10,975	110,979
Total investment funding	8,250	14,373	14,517	12,779	7,047	6,723	6,210	8,358	7,828	7,927	94,012

Commentary on water services investment

- The 2024-34 LTP is projecting \$94 million of capital investment over ten years.
- \$63 million of this is for renewals, against ten-year depreciation charges of \$87 million.
- \$31 million investment is provided for improving levels of service and growth.
- The major projects included in LTP relate to levels of service improvements for drinking water infrastructure over FY25/26 – FY27/28.
- Given that the LTP is projecting water services debt to be paid down over ten years (net \$20 million), effectively this means that projected capital investment is virtually fully funded from operating revenues (i.e., rates funding).
- A Wairarapa / Tararua water services CCO that borrows through LGFA would be likely able to borrow up to 5x operating revenues, which provides significant additional capacity to debt fund capital investment, which spreads the burden of this investment on ratepayers over a longer period.
- Under Local Water Done Well, there are significant savings achievable to current water consumers from utilising new borrowing headroom and updating water services financing strategies to debt finance capital investment, with rates (or charges) set to a level that covers costs and services and support debts balances, as opposed to direct funding capital investment.

Investment sufficiency performance measures

Asset sustainability ratio: comparison of renewals capital expenditure to depreciation

Asset sustainability ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Capital expenditure on renewals	8,050	6,917	5,473	5,283	6,577	6,241	5,717	5,838	7,181	6,029	63,306
Depreciation	6,973	7,071	8,032	8,195	8,522	9,310	9,422	9,521	10,096	10,187	87,329
Asset sustainability ratio	15.4%	(2.2%)	(31.9%)	(35.5%)	(22.8%)	(33.0%)	(39.3%)	(38.7%)	(28.9%)	(40.8%)	(27.5%)
Asset investment ratio: comparison of total capital expenditure to depreciation											
Asset investment ratio	FY24/25	FY25/26	FY26/27	FY27/28	EV/20/20	EV20/20	EV30/31	FV31/32	EV22/22	EV(22)/24	
					F120/29	1123/30	1150/51	1154/52	1132/33	FY33/34	Total
Capital expenditure	8,250	14,373	14,517	12,779	7,047	6,723	6,210	8,358	7,828	7,927	Total 94,012
Capital expenditure Depreciation	8,250 6,973	14,373 7,071	14,517 8,032	12,779 8,195	7,047	6,723	6,210	8,358	7,828	7,927	Total 94,012 87,329

sset consumption ratio: comparison of book value to replacement value

Asset consumption ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Book value of infrastructure assets	246,984	283,895	290, 380	294,964	320,180	317,593	314,381	339,785	337,517	335,25
Total estimated replacement value of infrastructure	455,324	499,306	513,823	526,602	560,340	567,063	573,273	608,198	616,026	623,95
Asset consumption ratio	54.2%	56.9%	56.5%	56.0%	57.1%	56.0%	54.8%	55.9%	54.8%	53.79

Commentary on investment sufficiency for water services in 2024-34 LTP

- Renewals investment is lower than depreciation, this level of investment should be confirmed by MDC that it is appropriate and consistent with the council's investment strategy.
- Total investment is in line with projected depreciation charges over ten years and does not lead to a significant decline in remaining useful life of the network over ten years.
- Subject to MDC's review of projected investment against the requirements of Water Services Delivery Plans, this level of investment would likely meet the 'investment sufficiency' test.



Projected water services investment requirements



Masterton District Council: Financing sufficiency

Financing sufficiency measures

Net debt to operating revenue ratio

Net debt to operating revenue	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Total net debt (gross debt less cash)	40,273	46,926	52,843	56,771	54,468	51,080	46,730	44,232	40,533	36,284
Operating revenue	16,512	16,982	18,287	18,975	19,935	20,819	21,204	21,525	22,312	22,982
Net debt to operating revenue	244%	276%	289%	299%	273%	245%	220%	205%	182%	158%

Borrowing headroom/(shortfall) against 500% LGFA limit for water CCO

Borrowings headroom/(shortfall) against limit	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Operating revenue	16,512	16,982	18,287	18,975	19,935	20,819	21,204	21,525	22,312	22,982
Debt to revenue limit	500%	500%	500%	500%	500%	500%	500%	500%	500%	500%
Maximum allowable net debt	82,560	84,910	91,435	94,875	99,675	104,095	106,020	107,625	111,560	114,910
Total net debt	40,273	46,926	52,843	56,771	54,468	51,080	46,730	44,232	40,533	36,284
Borrowing headroom/ (shortfall) against limit	42,287	37,984	38,592	38,104	45,207	53,015	59,290	63,393	71,027	78,626

Free funds from operations to debt ratio: The percentage of borrowings balance that is generated in funds from operations each yea

Free funds from operations (FFO) to debt ratio	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Total net debt	40,273	46,926	52,843	56,771	54,468	51,080	46,730	44,232	40,533	36,28
Funds from operations	6,804	7,550	8,430	8,681	9,180	9,941	10,390	10,686	11,357	12,00
FFO to debt ratio	16.9%	16.1%	16.0%	15.3%	16.9%	19.5%	22.2%	24.2%	28.0%	33.1

Commentary on financing sufficiency for water services in 2024-34 LTP

- Net debt to revenue for water services peaks at 299% before being paid down to 158% by FY33/34.
- At an all of council level borrowings remain well within borrowing limits.
- Projected water services revenues provide sufficient operating cashflow to support borrowing requirements.
- The projected level of investment in the 2024-34 LTP is fundable under status quo in-house delivery.
- Establishing a water CCO that could borrow to 5x operating revenues would provide significant additional borrowing headroom, and an opportunity to reduce revenue requirements for water services.

Projected debt to revenue by water service

Debt to revenue by water service (\$k)	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34
Drinking water - operating revenue	6,147	6,326	6,947	7,421	8,175	8,591	8,743	8,871	9,134	9,419
Drinking water - net debt	10,241	16,784	24,298	30,703	31,152	30,916	29,877	28,903	29,006	27,672
Drinking water - net debt to operating revenue %	167%	265%	350%	414%	381%	360%	342%	326%	318%	294%
Wastewater - operating revenue	9,304	9,472	9,980	9,964	10,144	10,493	10,694	10,883	11,290	11,652
Wastewater - net debt	29,762	28,206	25,005	21,948	18,796	15,312	11,668	10,278	6,688	3,983
Wastewater - net debt to operating revenue %	320%	298%	251%	220%	185%	146%	109%	94%	59%	34%
Stormwater - operating revenue	1,061	1,184	1,360	1,590	1,616	1,735	1,767	1,771	1,888	1,911
Stormwater - net debt	270	1,936	3,540	4,120	4,520	4,852	5,185	5,051	4,839	4,629
Stormwater - net debt to operating revenue %	25%	164%	260%	259%	280%	280%	293%	285%	256%	242%
Three Waters - net debt to operating revenue %	244%	276%	289%	299%	273%	245%	220%	205%	182%	158%

Funding source of investment

Investment funding source	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	FY30/31	FY31/32	FY32/33	FY33/34	Total
Capital revenues	1,440	170	170	170	170	170	170	170	170	170	2,970
Increase/(decrease) in debt	(8,851)	2,687	4,209	2,931	(3,046)	(4,428)	(4,622)	(2,318)	(3,281)	(3,218)	(19,937)
Funds from operations	15,661	11,516	10,138	9,678	9,923	10,981	10,662	10,506	10,939	10,975	110,979
Total investment funding	8,250	14,373	14,517	12,779	7,047	6,723	6,210	8,358	7,828	7,927	94,012

The 2024-34 LTP projects capital investment of \$94 million. Over ten years water services debt is projected to be paid down by \$20 million. Effectively this means that \$111 million of operating revenues are utilised to fund capital investment and debt repayments for water services over ten years.



A 5x operating revenue debt limit is included to compare against projected leverage for water services, in line with what LGFA have indicated could be provided to water services CCOs. There would be significant borrowing headroom for water services under a water services CCO.

All of council financing (including water services)



Projected council net debt to operating revenue