

# Nelson City Council

## Water Services Delivery Plan

### 2024 - 2034

Submitted 28 August 2025



Maitai Dam spillway



Water Treatment Plant





Brook Street Channel

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# 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

Council’s assessment is that we are already achieving financially sustainable delivery of water services. In order to maintain and improve this status up to and beyond the 30th of June 2028, we propose the following:

- Council will continue to plan its cost of operating services and investment requirements through the ongoing activity management plans for the water services in conjunction with the infrastructure strategy which looks at a 30-year horizon. Periodic condition assessment of assets and renewal planning with a view of the full life of the assets will continue to inform both the activity management plans and the infrastructure strategy which then in turn set the required operating costs and investment levels in our long-term plans that cater for required maintenance, regulatory standards and growth. In achieving the necessary levels of service and investment, Council is planning through the LTP 2024/34, to invest \$483 million on the water services assets with the spend ramping up over the ten years from \$29 million in 2024/25 to \$62 million in 2033/34.
- In order to deliver this level of investment, Council projects a borrowing requirement of \$143 million net new debt in the water services activities which would increase the borrowing level from \$98 million at June 2024 to \$240 million by June 2034.
- Council, in line with the LGFA, has a borrowing limit that states that net debt to revenue must not exceed 280%. Council up till now has not specifically defined a ring-fenced borrowing limit for the water service activities however, since Council approved the LTP 24/34 which had a maximum net debt to revenue ratio of 300% for the combined water activities in the 10 year period, we have used that as the limit for the time being. Council will need to consider a ring-fenced debt to revenue ratio for the water services as part of our financial strategy in the process of setting our LTP 2027/37.
- Council’s projected borrowings in the LTP 2024/34 are well within borrowing limits at the whole of Council level, with the net debt to revenue ratio not going above 185% across the 10 years and with debt headroom of \$270 million at June 2034. The water services activities reach their debt limit of 300% at June 2034 of the LTP 2024/34 and as mentioned above, this is due to the fact that the limit was not specifically set but rather implied. Until such time as the water services activities have a ring-fenced debt limit approved by Council, they will continue to have the “all of Council” debt headroom available as required.
- Council plans to raise sufficient revenue year on year to cover all operating costs which includes finance costs and depreciation. Council has seen very large infrastructure valuation increases during the years June 2019 to June 2024. It was decided that it was not affordable for current ratepayers to fully fund the increased depreciation on the revaluations in one step, as it would add a further 9.3% onto rates in the 2024/25 year. Therefore, Council chose to phase in the depreciation funding over the 10 years of the LTP. Council plans to fully fund depreciation by 2034.
- Our annual rates revenue rises cap will remain at Local Government Cost Index (LGCI) plus 2.5% and an allowance for growth. This limit is at a whole of Council level and all planned operational expenditure in the water services activities is factored in when aiming to remain within the cap. The planned revenue requirement in the LTP 2024/34 results in an increase in the annual residential water services charges from \$1,328 in the 2024/25 year to \$2,112 in the 2033/34 year at an average annual increase of 5.3%. Operating expenditure in the water services activities are funded from the following possible sources:
  - We levy fees and charges and targeted rates as a proxy to reflect the benefit received
  - We will claim for government grants or subsidies where we are providing services that are part of national programmes or where the government provides subsidies to us to provide certain services. We will also seek grants from other agencies when appropriate
  - Other sources of funding include interest and dividends received and other operating revenue such as rent received.

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## Proposed delivery model

### Proposed model to deliver financially sustainable water services

#### The proposed model to deliver water services

At the meeting of 3 April 2025 -following consultation with the community, Nelson City Council (NCC) has confirmed that the Council will retain the existing approach for delivering water services to the city. The service delivery method is a mix of in-house staff, consultants, contractors and a joint committee of Nelson City Council and Tasman District Council (TDC) – the committee provides Governance oversight of the operation of the Nelson Regional Sewerage Business Unit (NRSBU).

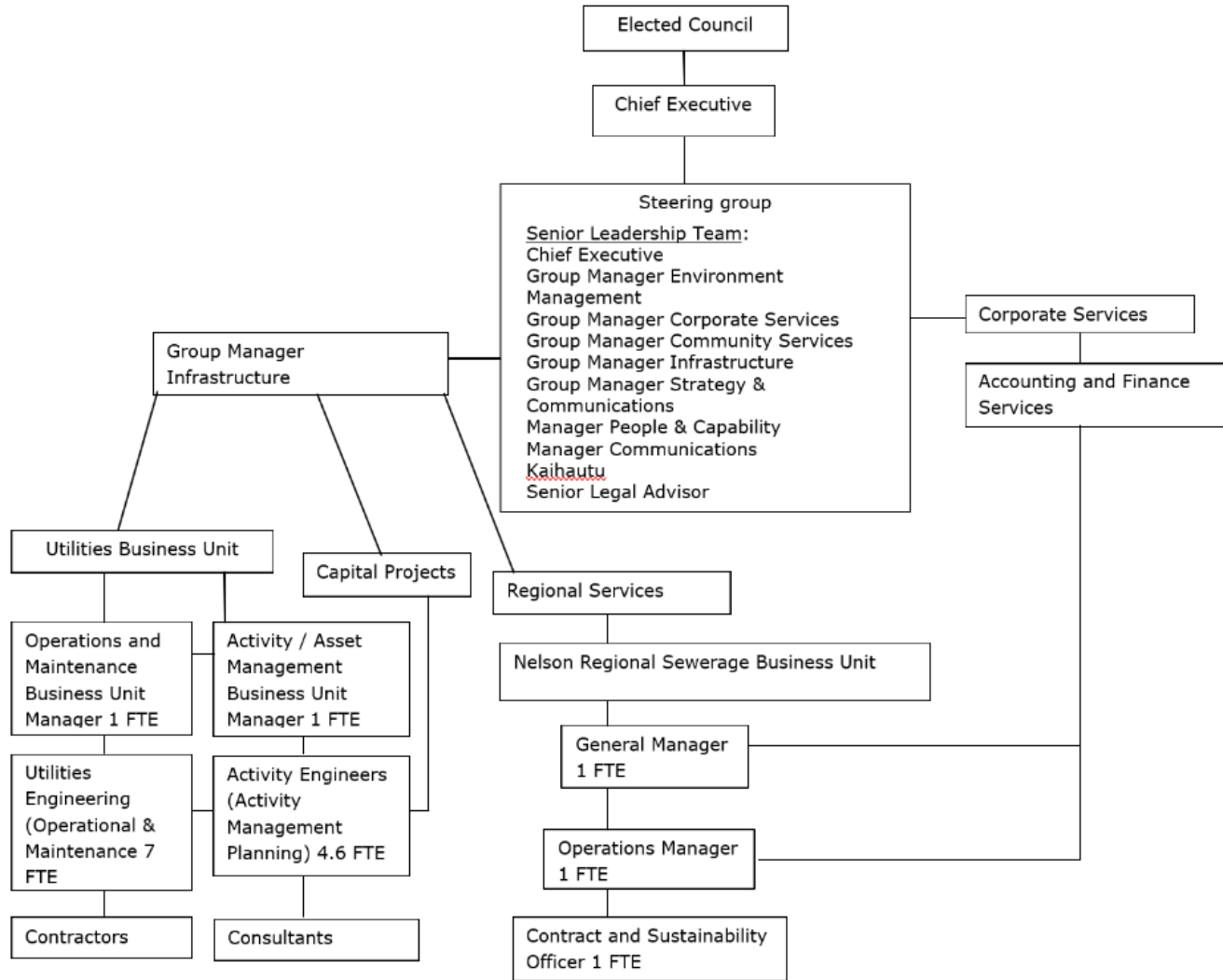
#### Shared services with Tasman District Council:

Nelson City Council and Tasman District Council have a number of shared services such as:

Joint ownership of Infrastructure Holdings Limited, which owns Port Nelson and Nelson Airport, Co-funding of the Nelson Provincial Museum, a shared Future Development Strategy, the development of consistent engineering standards, the joint Nelson Tasman Regional Transport Committee, the Nelson Tasman Regional Landfill Business Unit (NTRLBU) and the NRSBU. There is also a small area of the city that uses water from TDC and some very minor wastewater and stormwater pipes that cross the authority boundaries. The water utilities (except the NRSBU) are managed by the respective utilities teams under an Engineering Services Agreement between both Councils.

The following organisation charts set out the current in-house structure.

# Nelson City Council Organisation Chart



## Nelson Regional Sewerage Business Unit (NRSBU)

The Nelson Regional Sewerage Business Unit is constituted a Joint Committee of the Nelson City Council and the Tasman District Council pursuant to the provisions of the 7th Schedule to the Local Government Act 2002.

The purpose of the NRSBU is to manage and operate the wastewater treatment facilities at Bells Island and the associated network of pumpstations and rising mains. This facility treats wastewater from approximately 50% of the Nelson City Council area plus Richmond/Brightwater/Wakefield/Mapua townships in the Tasman District Council area.

The NRSBU has designated itself as a public benefit entity for the purposes of New Zealand Equivalents to International Financial Reporting Standards (NZIFRS).

The Bell Island treatment plant and associated reticulation network, and any additions or improvements to these assets are owned in equal parts by the Councils and are strategic assets of the Councils.

The NRSBU is a self-funding body which provides a service to its customers, which include the two Council wastewater activities and two separately serviced industrial users. Although the Councils are the two shareholders/owners of the NRSBU both Councils along with the major industrial customers fund the NRSBU through trade waste charges. The two Councils also fund any annual shortfall in NRSBU operating costs.

The NRSBU Joint Committee comprises either six or seven members appointed as follows:

- Two members appointed by the Tasman District Council (at least one of whom will be an elected member of the Tasman District Council);
- Two members appointed by the Nelson City Council (at least one of whom will be an elected member of the Nelson City Council);
- May include one member independent of either Council and not involved in any business related to the NRSBU activities.
- One non-voting member representing, and appointed by, the NRSBU Major Industrial Customers.
- One member representing and nominated by local iwi and confirmed by both councils.

The management staff of the NRSBU are employees of Nelson City Council. Nelson City Council also provides the Administration, IT, Financial and Accounting services for the business unit.

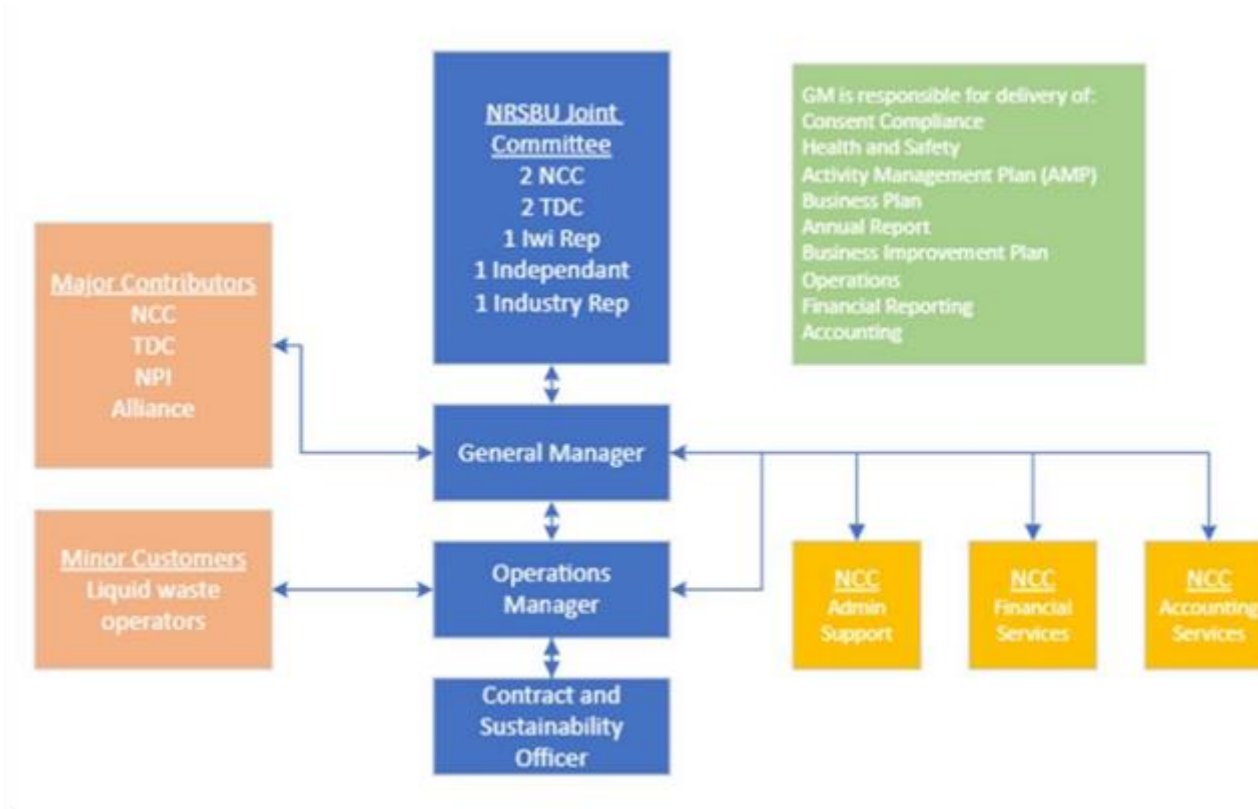
Nelson Regional Sewerage Scheme assets:

- 16.8km of rising mains
- Septage reception facility
- Five pump stations
- Wastewater Treatment Plant
- 712m outfall
- Biosolids Application Facility

Refer to the NRSBU Activity Management Plan for information regarding asset condition, critical assets, and asset replacement:

<https://static1.squarespace.com/static/620db8832e824956105664c9/t/66d8c8d3ed8ffb3c7b254f54/1725483277985/2024-34+NRSBU+Activity+Management+Plan>

## NRSBU Organisation Chart



## Nelson City Council Infrastructure Services Table of Activities

<b>Infrastructure Services: Utilities - Water Supply, Wastewater, Stormwater, Flood Protection, Coastal Hazards</b>	<b>Water Supply Abstract water, treat and distribute</b>	<b>Wastewater Service reticulation: City wide</b>	<b>Wastewater Treatment: City centre and North city - Nelson Sewerage treatment Plant</b>	<b>Wastewater Treatment: South city - Nelson Regional Sewerage Business Unit - Regional Treatment Plant</b>	<b>Stormwater Collect, detain, transport and discharge</b>	<b>Flood Protection Channel, transport and discharge</b>	<b>Coastal Hazards Coastal structures – tide gates</b>
Governance	Nelson City Council	Nelson City Council	Nelson City Council	Joint Committee Nelson City Council and Tasman District Council	Nelson City Council	Nelson City Council	Nelson City Council
Asset management	Dedicated asset manager as part of In-house team covering all activities	Dedicated asset manager as part of In- house team	Dedicated asset manager as part of In- house team	Part time contracted asset management support as part of In- house team specific to NRSBU activities	Dedicated asset manager as part of In- house team covering all activities	Dedicated asset manager as part of In-house team covering all activities	Dedicated asset manager as part of In-house team covering all activities
Operations and Maintenance	In house team managing all activities.  Day to day operation of raw water intakes, treatment plant and reticulation is contracted out – typically under 5 year terms, as follows:	In house team managing all activities  Day to day operation of pump stations and reticulation is contracted out to Nelmac Ltd	In house team managing all activities  Day to day operation of treatment plant is contracted out to Nelmac Ltd	NCC In house team managing all activities specific to NRSBU activities  Day to day operation of treatment plant and reticulation is contracted out to Nelmac Ltd	In house team managing all activities  Day to day operation of reticulation, pump stations and detention ponds is contracted out to Nelmac Ltd	In house team managing all activities  Day to day maintenance of river and stream channels is contracted out to Nelmac Ltd	In house team managing all activities  Day to day maintenance of coastal structures is contracted out to Nelmac Ltd

	Raw water intakes, treatment plant – Fulton Hogan Ltd  Reticulation – Nelmac Ltd  TDC supplies approximately 2% of the city’s potable water to small pockets of development adjacent the territorial authority boundary.						
Capital Projects Delivery	<p>In house team managing external contractors and consultants.</p> <p>Projects and budgets are identified in the LTP or Annual Plan.</p> <p>Design and consent documentation of projects are typically undertaken by external consultants. Council predominantly uses a panel of approved consultants – currently Tonkin &amp; Taylor, BECA, Stantec with some specific projects designed by WSP or CGW.</p> <p>Construction is typically tendered on the open market.</p>						
<b>Corporate Services</b>							
Finance and Accounting Services	In house team covering all activities	In house team covering all activities	In house team covering all activities	NCC In house team covering all activities	In house team covering all activities	In house team covering all activities	In house team covering all activities

### **Water services revenues**

Council operates closed financial accounts for the water services – each activity is separately identified within Council finances. These are funded by targeted rates and specific utility fees and charges. There is no cross-subsidisation from general rates. See Appendix 'C' for a copy of the LTP2024-34 financial details for each activity.

### **Proposed delivery model**

#### **The benefits of this model:**

As part of the community consultation on the proposed water services delivery methods Council prepared a Statement of Proposal (SOP) that set out the various models with advantages and dis-advantages. A copy of the SOP is appended to this Plan in Appendix A. Model a was identified as 'Remaining with the existing approach for delivering water services'. The advantages with this model were identified as:

- Simplicity and economic efficiency.
- Structure already in place to effectively manage and deliver water services to the Nelson region.
- Nelson City utilities in good shape.

#### **The dis-advantage with this model was identified as:**

- Borrowing capacity with the Local Government Funding Agency (LGFA) currently limited to 2.80 x income level from 1 July 2025.

Note: The LTP 2024-34 has Council debt at 1.82 x income level at Year 10 so still some headroom for additional borrowing if required.

#### **Proposed revenue collection methods:**

Funding for the water activities is recovered from the community through a mix of targeted rates and user fees and charges.

- Yearly funding requirements for each activity are identified in Long Term Plans and Annual Plans. The targeted rates and major delivery charges such as trade waste and water by meter are also set under these documents - at a level that will recover the funding requirements.
- Some sundry fees and charges for minor parts of the activities such as special meter reads and grease trap inspections are set annually by Council - after consultation with the community if required.

### Source of Funding for Activities

Activity	Targeted Rates under Local Government (Rating) Act 2002	Fees and Charges set under the Local Government Act 2002	Central Government
Water Supply	Annual Supply Charge Water supplied through meters		NEMA disaster contributions. External income such as from Infrastructural Acceleration Fund (IAF).
Wastewater	Drainage rates	Trade Waste Charges NRSBU investment return	NEMA disaster contributions. External income such as from Infrastructural Acceleration Fund (IAF).
Stormwater	Drainage rates		NEMA disaster contributions External income such as from Infrastructural Acceleration Fund (IAF).

## Implementation plan

### Implementation plan

#### Implementing the proposed service delivery model

#### Implementation Plan

##### Council responsible for service delivery:

Water Supply: NCC - with approx 1% of the city (Wakatu Industrial Estate) supplied directly by TDC. TDC also supplies bulk water to NCC for NCC to distribute to a small residential area adjacent the territorial boundary on Champion Road.

Wastewater: NCC with wastewater from approx 50% of the city treated by NRSBU under a joint committee arrangement with TDC.

Stormwater: NCC.

##### Service Delivery Process

Nelson City Council has elected to retain the existing water services delivery model it currently operates. This model is based on water services being delivered predominantly by Council via internal staff supported by external consultants and contractors - a small amount of water is purchased from TDC for NCC to supply to residential properties and TDC directly supply water services to a small industrial estate under and Engineering Services Agreement. NCC and TDC support a joint committee to administer the NRSBU. All staff and contracts with external consultants and contractors are in place. The joint committee with TDC is likewise in place and is expected to continue to operate.

##### Commitment to services delivery model

NCC and TDC have both confirmed their intention to retain existing services delivery methods. Some strengthening of an internal business unit has been signalled by TDC.

**Establishment date:** Council confirms that the water services delivery model is currently in place and operative. For the purposes of this Plan the Establishment Date is 1 July 2025.

## Consultation and engagement

### Consultation and engagement

#### Consultation and engagement undertaken

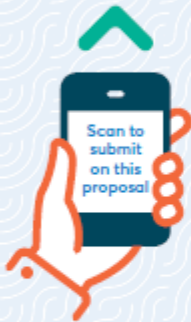
Nelson City Council undertook consultation with the community prior to adopting the preferred water services delivery model. The following summarises the timeframes for the various stages:

- 5 December 2024 Council meeting to adopt statement of proposal
- 10 January 2025 - 24 February 2025 Community consultation on proposed water service delivery options. Below is the summary document. See Appendix A for the complete Statement of Proposal
- 12 - 13 March 2025 Hearing submissions – meeting cancelled as no submitters wished to speak to their submissions.
- 3 April 2025 Deliberations and decision.

Refer Appendix A for the consultation Statement of proposal.

No further consultation has been undertaken in the preparation of the Water Services Delivery Plan.

# Water done well



[shape.nelson.govt.nz/local-water-done-well](https://shape.nelson.govt.nz/local-water-done-well)



## The Proposal

As part of developing a Water Services Delivery Plan under the Local Government Act 2024, Nelson City Council is required to make a decision about how it will deliver water services to the community. Council is seeking community views on whether Council should remain with the existing approach for delivering water services.

## The Explanation

Council currently owns, operates and maintains the majority of the three water networks within the city. The day-to-day operation and maintenance of the drinking water, storm water and wastewater networks is carried out by various contractors. Council considers that the existing approach for delivering water services has served the city well in the past and will continue to do so into the future.

## A Model A (Recommended)

Retain the existing approach for delivering water services:

### Advantages

- Simplicity and economic efficiency.
- Structure already in place
- Nelson City utilities in good shape.

### Disadvantages

- Borrowing capacity limited.

## B Model B

Establish, join, or amend a water services council-controlled organisation (WSCCO):

### Advantages

- 'Arms-length' approach that could allow decision making focused on water service outcomes.
- Ability to access higher levels of borrowing.

### Disadvantages

- Substantial unknowns.
- No ability to join or amend existing WSCCO.
- Cost of establishing & ongoing funding.
- May increase costs to Nelson to support other Councils.

## C Model C

Establish, join, or amend a joint local government arrangement under the Local Government Act 2002:

### Advantages

- Share costs of service delivery.

### Disadvantages

- Substantial unknowns.
- Cost of establishing and ongoing funding.
- Some dilution of control.
- May increase costs to Nelson to support other Councils.

## Assurance and adoption of the Plan

### Assurance and adoption of the Plan

#### Council resolution to adopt the Plan

The Plan was formally adopted by Council on 7 August 2025. A copy of the minutes for the meeting can be found on Council's website or by the following link: <https://docspublished.com.au/nelsoncitycouncil>

**Certification of the Chief Executive of Nelson City Council**

Chief Executive comment:

- Regulatory compliance: Monitoring of compliance with resource consents is carried out by a number of different groups depending on the nature of the consent – Council regulatory staff, operations and maintenance teams, operations and maintenance contractors and capital works project managers and construction contractors. Council is confident the monitoring is robust and there is strict adherence to consent conditions but accepts compliance is subject to human error.
- Asset condition: Council has dedicated utilities asset management, operations and maintenance teams that manage the utilities networks. Above ground assets are inspected regularly and maintained appropriately. Council has long established budgets for cctv monitoring of below ground gravity pipelines which provide ongoing snapshots of asset condition. The condition of pressure networks is established through a mix of proactive inspections and as a result of repairs. Council recognises that condition assessments are made using engineering judgement supported by these investigations.
- Investment requirements: Council prepares Asset/Activity Management Plans (AMPs), a Long Term Plan (LTP) and an Infrastructure Strategy every three years. These documents set out the capital and operating works programmes and funding requirements for the operation, maintenance, renewal and growth of the city utilities. The contents of this Water Services Delivery Plan are based on the information contained in the water utilities AMPs 2024-34 and the LTP 2024-34. Council investment decisions are made in line with these documents - however changes can be made to work programmes and funding requirements as a result of unforeseen events or as part of the Annual Plan.
- Asset valuations: Council undertakes detailed independent valuations of assets every two years and applies a cost index to those valuations for the intermediate year.
- Certainty around financial projections: Subject to volatility in the construction market Council expects the financial projections for the first three years of the LTP are likely to be in the 80-90% confidence range with subsequent years reducing in confidence.

I certify that this Water Services Delivery Plan:

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

Signed:   
ARDFEC4BAFFFE4E3

Name: Nigel Philpott

Designation: Chief Executive

Council: Nelson City Council

Date: 09-Dec-25

Initial  


## Part B: Network performance

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

#### Investment required in water services

##### Serviced population

Projected serviced population	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
Nelson City population (total) based on March 2023 DOT Consulting Population Projections 2018-2058 Results	56,469	57,001	57,532	58,064	58,535	59,006	59,477	59,948	60,419	60,837
Serviced population	51,051	51,531	52,012	52,492	52,918	53,334	53,770	54,196	54,621	54,999
Total residential connections	22,032	22,239	22,447	22,654	23,043	23,432	23,821	24,210	24,598	24,769
Total non-residential connections	2,085	2,105	2,124	2,144	2,181	2,217	2,254	2,291	2,328	2,344

Note: Serviced population is based on wastewater connections but water supply is similar

See table below regarding variation of connections to individual services

Serviced areas			
Serviced areas (by reticulated network)	Water supply # schemes	Wastewater #schemes	Stormwater # catchments
<b>Residential areas</b> (If more than one identify separately)	Single scheme - Nelson (NEL001) 20,145 connections	Nelson (WWN-00237) 10,502 connections Nelson Regional Sewerage Scheme (WWN-00236) 11,530 connections	Multiple stream, river and gully based catchments. Asset Management split into 16 river and stream catchment areas 14,683 properties served
<b>Non-residential areas</b> (If more than one identify separately)	Nelson (NEL001) 1,807 connections	Nelson (WWN-00237) 1,269 connections Nelson Regional Sewerage Scheme (NRSBU) (WWN-00236) 816 connections	1,457 properties served
<b>Mixed-Use rural drinking water schemes (where these schemes are not part of the council's water services network)</b>	[name of scheme and number of connections]  DEL002 (Delaware Bay Water Company) 14 properties (Maori Pa Stream) GLE013 (Glenwood Water Company Limited) 65 properties? (Teal River for Glenwood) HIRO01 (Hira School) 1connection  KAN002 (Kanukanui Hills Subdivision) population = 9 properties (Maitai River, Kanukanui Hills) KAN300 (Unique Creek Ltd) 26 properties (Kanuka Rise upper intake, Kanuka Rise bore) Cable Bay Rd (Wakapuaka catchment) 9 properties Quail Rise subdivision - # of connections unknown Waahi Taakaro (golf course) 1 connection Cable Bay campground – 1 connection	n/a	n/a
<b>Areas that do not receive water services</b> (If more than one identify separately)	Approx 534 residential, 571 rural and 323 commercial/industrial zoned properties that are not connected to NCC network. The city water supply network goes to the Glen and Wakapuaka in the north – a number of rural properties beyond the Gentle Annie Saddle and at Cable Bay are not able to be connected.	Total: 2,160 mostly rural properties not connected to NCC network The city wastewater network also goes as far as the Glen. A number of rural properties beyond Wakapuaka and at Cable Bay are not able to be connected. Likewise a number of rural properties in the valleys closer to the city centre are also not able to be serviced.	Total: Approx. 7,129 properties not connected to the network. There are a number of different categories for these: as-builts haven't been registered by GIS yet e.g. new subdivisions, properties still with soak pits rather than a connection to the street network, rural properties and reserves.

	Likewise a number of rural properties in the valleys and some that sit above the RL that council can supply closer to the city centre are also not able to be serviced.		
<p><b>Proposed growth areas</b></p> <ul style="list-style-type: none"> <li>Planned (as identified in district plan) The Nelson Resource Management Plan does not set out expected numbers of Lots or dwellings. In order to make longer term provision for growth in the wider Nelson Tasman Region Nelson City Council and Tasman District Council jointly developed the Nelson Tasman Future Development Strategy 2022- 2052 (FDS). This document has been adopted by Council and will support future Plan Changes. The FDS is a strategic document prepared to provide a regional response to growth in the combined authority areas. The dwelling numbers shown in this table represent potential rather than actual. The strategy's assumption is that only 15% of potentially suitable sites will be developed over the next 30 years (FDS section 7.1). Council infrastructure decisions in the Long Term Plan are influenced by current and planned developments as signalled by subdivision activity and plan changes. Population growth statistics suggest an increase in the Nelson population of approximately 4,400 (see Table above) over the 2024-34 time frame - immediate infrastructure capacity requirements and analysis are based on this figure. The FDS also provides an input into long term planning for more major infrastructure such as new sources of raw water.</li> </ul> <p>Appendix E sets out the proposed water supply projects identified to service the growth areas in the FDS.</p>	<p>[name of growth area and number of connections]</p> <p><b>Urban Greenfield Growth Areas: 4,905 approx dwellings (2022-52) at:</b> Saxton Orchard Flats (Maitai Valley) Griffin Site Maitahi/Bayview Marsden &amp; Ngawhatu Orphanage West Saxton Extension Orphanage West Extension</p> <p><b>Urban Intensification Growth Areas: 3,990 approx dwellings (2022-52) at:</b> Dodson Valley Road (and surrounds) Nile St East Fairfield Park Waimea Rd North Hospital/Nelson South Victory Nayland North Tahunanui Drive East Stoke Centre Stoke School (and surrounds) Nayland South Port Hills Marlowe St (and surrounds) Washington Valley North Victoria Rd (and surrounds) City Centre South City Centre North Wood (South) Arapiki and Isel Washington Valley South St Vincent The Brook</p> <p><b>Intensification Areas Subject to a Dynamic Adaptive Policy Pathway: 465 approx dwellings (2022-52) at:</b> Neale Park Vanguard St (and surrounds) Gloucester St (and surrounds)</p>		

	<p>Tahunanui Drive West Wood North</p> <p><b>Residential Infill Potential: 3,515 approx dwellings (2022-52) at:</b>                  Nelson North (e.g. Atawhai, Marybank)                  Nelson Central (e.g. Britannia Heights, Washington Rd, Nelson Hill, Toi Toi)                  Tahunanui (e.g. Tahunanui Hills, Princess Drive)                  Stoke (e.g. Enner Glynn, Suffolk Rd)</p> <p><b>Network Capacity for Growth</b></p> <ul style="list-style-type: none"> <li>• <b>Water Supply.</b> The raw water sources and the water treatment plant are able to provide 50,000m3 of water per day for the city. Current maximum daily demand is approx. 30,000m3/d. Based on current demand and usage profiles Council is able to service a population of approximately 80,000 people. Statistics NZ medium growth predictions for the city suggest a population of close to 65,000 by 2058. Council has a programme of works to provide reticulation capacity for growth areas to meet the projected increase – refer Appendices C and E.</li> <li>• <b>Wastewater:</b> The Wastewater treatment plant was designed to the following requirements:                      Hydraulic loadings – to year 2050.                      Load (Biochemical oxygen demand, suspended solids etc.) – to year 2050 (assessments will be undertaken during the period of this Plan to determine the state of actual loadings against the design parameters).                      The treatment loading and capacity and plant performance is monitored to ensure treatment capacity continues to meet demand. Council has a programme of works to provide reticulation capacity for growth areas to meet the projected increase – refer Appendix C.</li> <li>• <b>Stormwater:</b>                      Provision of intensification infrastructure is identified for the City Centre, Stoke and Tāhunanui, where higher density and mixed-use environment will see growth consolidated. Most of the new greenfield potential sites identified are within the Maitai, Marsden, and Ngawhatu valleys. Parts of Nelson Central and Tāhunanui are subject to flood risks and future intensification will be guided by the outcome of a Dynamic Adaptive Planning Pathways process, which is currently underway. Many of the new developments across the city will be required to install on-site stormwater detention devices in accordance with the Nelson Tasman Land Development Manual (NTLDM).</li> </ul>		
	Water supply	Wastewater	Stormwater
<ul style="list-style-type: none"> <li>• Infrastructure enabled (as identified and funded in LTP)</li> </ul>	See Appendix E. NCC – TDC Link (Saxton) Suffolk Rd (Saxton to Ngawhatu) upgrade Maitahi Development Growth Project Bayview Development Growth Project IAF Bridge St IAF Collingwood St IAF Halifax St IAF Rutherford St Atawhai Reservoirs & trunk main Ngawhatu Valley high level reservoir	Saxton Rd upgrade Central City intensification capacity increases Ngawhatu Valley TM – Stage 2 Mahitahi development Bayview development Bridge St pipeline upgrade Paru Paru Rd pumpstation upgrade NWWTP replacement Atawhai Rising Main Main Road Stoke upgrade	York Terrace City Centre intensification IAF pipeline upgrade – Bridge Street.

## Levels of Service

The following Levels of Service are taken from the LTP 2024-34. These are reviewed every three years as part of the LTP process.

Water Supply Levels of Service			Performance Target			
Level of service	Performance Measures	Previous and current performance	2024/25 (Year 1)	2025/26 (Year 2)	2026/27 (Year 3)	2027/28 - 2033/34 (Year 4-10)
<b>Quality</b> ^We provide good quality water which is safe to drink	The extent to which drinking water supply complies with: a) Table 1 of the drinking water standards# (Maximum acceptable values for microbiological determinands)*, and b) Table 2 of the drinking water standards# (Maximum acceptable values for inorganic determinands)* c) Table 3 of the drinking water standards# (Maximum acceptable values for organic determinands) Measurement Procedure 1 (Mandatory Performance Measure 1)	New measure.  For the period 1 January 2023 – 30 June 2023 the drinking water quality compliance was assessed against the new Water Services (Drinking Water Standards for New Zealand (DWSNZ)) Regulations 2022 - with full compliance recorded for bacterial and protozoa tests and 99.9% compliance for the sampling frequency and 100% for the minimum chlorine residual.	100% compliance with Tables 1,2 and 3 of the drinking water standards			
	Total number of valid complaints per 1,000 connections about any of the following*: a) drinking water clarity b) drinking water taste c) drinking water odour d) drinking water pressure or flow e) continuity of supply f) Council’s response to the above issues Measurement Procedure 2 (Mandatory Performance Measure 4)	26 complaints per 1000 connections in 2022/23 21 complaints per 1000 connections in 2021/22 16 complaints per 1000 connections in 2020/21	No more than 50 valid complaints per 1,000 connections			

<p><b>Reliability</b></p> <p>^We provide a reliable water supply for our customers</p>	<p>Average drinking water standard consumption per day per resident*</p> <p>Measurement Procedure 3 (Mandatory Performance Measure 5)</p>	<p>275L per person per day 2022/23 290L per person per day 2021/22 289L per person per day 2020/21</p>	<p>Normal demand less than 500L per person per day. This includes both domestic and commercial-industrial</p>
	<p>Percentage real water loss from the system*</p> <p>Measurement Procedure 4 (Mandatory Performance Measure 2)</p>	<p>22.1% in 2022/23 19% in 2021/22 18.8% in 2020/21</p>	<p>Real water loss less than 25%.</p>
<p><b>Customer Service</b></p> <p>^We provide well built, operated and maintained water supply systems so that any failures can be managed and responded to quickly.</p>	<p>When attending a call-out in response to a fault or unplanned interruption to the system, the following median response times will be measured*:</p> <p>a) attendance for urgent call-outs: from the time notification is received to the time service personnel reach the site*</p> <p>b) resolution of urgent call-outs: from the time notification is received to the time service personnel confirm resolution of the fault or interruption*</p> <p>c) attendance for non-urgent call-outs: from the time notification is received to the time that service personnel reach the site*</p> <p>d) resolution of non-urgent call-outs: from the time notification is received to the time service personnel confirm resolution of the fault or interruption*</p> <p>Measurement Procedure 2 (Mandatory Performance Measure 3)</p>	<p>Median attendance times: 22 minutes in 2022/23 24 minutes in 2021/22 23 minutes in 2020/21</p> <p>Median attendance times: 172 minutes in 2022/23 152 minutes in 2021/22 127 minutes in 2020/21</p> <p>Median attendance times: 100 minutes in 2022/23 99 minutes in 2021/22 103 minutes in 2020/21</p> <p>Median attendance times: 1,113 minutes in 2022/23 1,283 minutes in 2021/22 1,264 minutes in 2020/21</p>	<p>a) Contractor to attend urgent call-outs in a median time of 30 minutes or less.</p> <p>b) Contractor to resolve urgent call-outs in a median time of 480 minutes or less.</p> <p>c) Contractor to attend non-urgent callouts in a median time of 120 minutes or less.</p> <p>d) Contractor to resolve non-urgent call outs in a median time of 24 hours (1,440mins) or less.</p>

Wastewater Levels of Service			Performance Target
Level of service	Performance measure	Previous and current performance	2024 -2034 (Year 1-10)
<b>Reliability</b> ^We provide reliable wastewater systems with a minimum of odours, overflows or disturbance to the public.	Level of compliance of treatment plant with resource consent conditions Measurement Procedure 1	100% compliance in 2022/23 100% compliance in 2021/22 100% compliance in 2020/21	Compliance with 100% of the resource consent conditions for 90% of the time.
	Number of dry weather overflows from the sewerage system, per 1,000 connections* Measurement Procedure 2 (Mandatory Performance Measure 1)	3 dry weather overflows per 1,000 connections in 2022/23. 3 dry weather overflows per 1,000 connections in 2021/22 4 dry weather overflows per 1,000 connections in 2020/21	Fewer than 15 per 1,000 connections.
<b>Response</b> ^We provide well built, operated and maintained wastewater systems so that any failures can be managed and responded to quickly.	Median response times are measured for overflows resulting from a blockage or other fault in the sewerage system:  a) attendance time: from when notification is received to the time service staff reach the site  b) resolution time: from the time notification is received to the time service staff confirm resolution of the blockage or other fault* Measurement Procedure 2 (Mandatory Performance Measure 3)	Median response time of 20 minutes in 2022/23 Median response time of 21 minutes in 2021/22 Median response time of 25 minutes in 2020/21  Median resolution time of 163 minutes in 2022/23 Median resolution time of 191 minutes in 2021/22 Median resolution time of 195 minutes in 2020/21	a) Contractor to attend in median time of 60 minutes or less  b) Contractor to resolve issue in a median time of 480 minutes or less

<b>Quality</b> ^We provide wastewater systems that aim to have minimal adverse affect on the environment	Compliance with territorial authority’s resource consents for discharge from the sewerage system measured by number of: a) abatement notices b) infringement notices c) enforcement orders d) convictions in relation to those resource consents* Measurement procedure 1 (Mandatory Performance Measure 2)	100% compliance in 2022/23 100% compliance in 2021/22 100% compliance in 2020/21	a) ≤2 b) ≤2 c) 0 d) 0
	The total number of valid complaints received about any of the following: a) sewage odour b) sewerage system faults c) sewerage system blockages d) Council’s response to issues with the sewerage system, expressed per 1,000 connections to the sewerage system* Measurement Procedure 2 (Mandatory Performance Measure 4)	17 valid complaints per 1,000 connections in 2022/23 12 valid complaints per 1,000 connections in 2021/22 16 valid complaints per 1,000 connections in 2020/21	No more than 20 valid complaints a year per 1000 connections

Stormwater Levels of Service			Performance Target			
Level of service	Performance measure	Previous and current performance	2021/22 (Year 1)	2022/23 (Year 2)	2023/24 (Year 3)	2024/25–2030/31 (Year 4-10)
<b>Environmental Protection</b> ^ We provide stormwater systems that do not adversely affect or degrade the receiving environment	Compliance with resource consents for discharge from the stormwater system, measured by the number of: a) abatement notices b) infringement notices c) enforcement orders, and d) successful prosecutions received in relation to those resource consents* Measurement Procedure 1 (Mandatory performance measure 2)	No contraventions between 2018/19 and 2022/23	a) ≤2 b) ≤2 c) 0 d) 0			

<p><b>Customer Response</b></p> <p>^We provide well built, operated and maintained stormwater systems so that any failures can be managed and responded to quickly</p>	<p>The number of valid complaints received about the performance of the stormwater system, per 1,000 properties connected to the stormwater network*</p> <p>Measurement Procedure 2 (Mandatory performance measure 4)</p>	<p>20 complaints per 1,000 properties in 2022/23 10 complaints per 1,000 properties in 2021/22 12 complaints per 1,000 properties in 2020/21</p>	<p>No more than 20 valid complaints per 1,000 connections per year</p>
<p><b>Customer service</b></p> <p>^We have measures in place to respond to and reduce flood damage from stormwater to property and risk to the community</p>	<p>a) The number of flooding events that occur b) For each flooding event, the number of habitable floors affected per 1,000 properties connected to the stormwater network*</p> <p>Measurement Procedure 2 (Mandatory performance measure 1)</p>	<p>2022/23: a) One major flood event on 17-20 August 2022 and one moderate flood event on 6 May 2023. b) Aug 2022: 2 per 1,000 properties affected; May 2023 &lt; 1 per 1,000 properties affected</p> <p>2021/22: a) One localised flood event occurred on 5 August 2021 in South Stoke b) No habitable floor damage in 2019/20 - 2021/22</p>	<p>No more than 10 per 1,000 urban properties with habitable floor damage in any one year</p>
	<p>Median response time to attend a flooding event, measured from the time that notification is received to the time service personnel reach the site*</p> <p>Measurement Procedure 2 (Mandatory performance measure 3)</p>	<p>Median response time 10 minutes in 2022/23 16 minutes in 2021/22 14 minutes in 2020/21</p>	<p>Median response time is less than 60 minutes</p>

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

- Asset condition: Above ground assets are inspected regularly and maintained by external contractors under long duration contracts that require asset management reporting to Council. For below ground assets Council has long established budgets for CCTV monitoring of gravity pipelines - which provide ongoing snapshots of asset condition. The condition of pressure networks is established through a mix of proactive inspections and as a result of repairs. Council recognises that condition assessments are made using engineering judgement supported by these investigations.
- In 2021 Council engaged WSP Ltd to prepare a detailed 3 Waters Piped Asset Data Management Report – Final version dated September 2021. Information in the table below regarding reticulation condition grading is sourced from this report. A copy of this report is available if required. The information further below (working lives) is from the AMPs – not based on the WSP report.

**Asset condition assessment:**

<i>Asset</i>	<i>Condition Assessment</i>
Water Supply Raw water and Treatment Plant	Contractor - specific requirement in maintenance contract to update Asset Management Plan with Asset history, including maintenance, replacement, life expectancy cost, etc.
Water Supply Reticulation	Condition assessed by contractors during repairs and maintenance. Funded programmes of monthly condition assessment of reservoirs and pump stations plus five yearly structural assessment of reservoirs on a rolling basis.
<i>Wastewater Treatment Plant and Pump Stations – Above Ground Assets</i>	Wastewater Treatment Plant: Contractor - specific requirement in maintenance contract to provide Annual Asset Renewal and Optimisation Plan with Asset history, including maintenance, replacement, life expectancy cost, etc.  Pump Stations: Contractor inspects monthly and provides feedback to utilities team on condition and maintenance requirements.

<p>Wastewater Reticulation – Below Ground Assets</p>	<p>Funded programme of cctv assessments each year. Specific funding lines for condition assessment (See Appendix C).</p>
<p>Stormwater Detention Ponds and Pump Stations - Above Ground Assets</p>	<p>All detention dams inspected annually - condition is assessed and maintenance programmes developed. Detention Dams that are high and medium PIC are subject to requirements of the Building Act.</p>
<p>Stormwater Reticulation - Below Ground Assets</p>	<p>Condition assessed by contractors during repairs and maintenance. Network intakes inspected 2-6mthly depending on criticality, non-return valving checked 6 monthly and tide gates monthly.</p>

Parameters	Drinking supply	Wastewater	Stormwater
<b>Average age of Network Assets (pipes)</b>	38 years	32 years	36 years
<b>Critical Assets</b>	<ul style="list-style-type: none"> <li>• Headworks including dams and intakes</li> <li>• Raw water trunk mains</li> <li>• Raw water pump stations</li> <li>• Water Treatment Plant including Clearwater Reservoir</li> <li>• Treated water trunk mains</li> <li>• Treated water pump stations</li> <li>• Reservoirs</li> </ul>	<ul style="list-style-type: none"> <li>• All pump stations.</li> <li>• Rising mains.</li> <li>• Trunk mains.</li> <li>• The wastewater treatment plant.</li> <li>• Assets within an area widely prone to a specific hazard e.g. liquefaction.</li> </ul>	<ul style="list-style-type: none"> <li>• The 2 stormwater pumping stations (The Wood and Centennial Road)</li> <li>• Stormwater rising mains to stormwater pumping station outfalls</li> <li>• Stormwater Detention Dams, including 1 classifiable large dam, in the York catchment</li> <li>• Large pipes and box culverts (culverts under roads may be transport assets)</li> <li>• Stormwater reticulation that services critical facilities</li> <li>• All urban sections of streams within the stormwater network</li> <li>• Manually and electrically operated flood gates</li> </ul>
<b>Above ground assets</b> <ul style="list-style-type: none"> <li>• Treatment plant/s</li> <li>• Percentage or number of above ground assets with a condition rating</li> <li>• Percentage of above –ground assets in poor or very poor condition</li> </ul>	1 approx. 80%  <10%	2 [approx. 80%]  [<5%]	n/a [approx. 90%]  [<10%]
<b>Below ground assets</b> <ul style="list-style-type: none"> <li>• Total km of reticulation</li> <li>• Percentage of network with condition grading</li> <li>• Percentage of network in poor or very poor condition</li> </ul>	428km 98% 36%	428km 98% 34%	252km 99% 5%

## **Water Supply, Wastewater and Stormwater assets:**

### **Asset Quantity, Valuation, Condition, Criticality, and Renewals**

The following section sets out background information about the three water utilities – particularly quantities, valuations, condition, criticality and renewals. More details about the information can be found in the AMPs and the LTP2024-34. Links are provided to the AMPs with the utility specific sections. Use the following link to refer to the Nelson City Council Long Term Plan 2024-2034:

<https://www.nelson.govt.nz/repository/libraries/id:2r883m1me1cxbyryo0mp/hierarchy/1Your%20Council/Long-Term%2C%20Annual%20Plans%20and%20Reports/Long-Term%20Plan/Nelson%20City%20Council%20Long%20Term%20Plan%202024-2034%20-%20financial%20tables.pdf>

The theoretical renewal timing and cost graphs for all three utilities show that Council is facing a future ‘bow wave’ of renewals as assets come to the end of their service lives. Council expects that expenditure on renewals will increase as quickly as possible and potentially slightly in advance of the theoretical renewal profile in order to flatten the approaching peak.

## Water Supply:

### Quantity and Valuation

The following table sets out the most recent asset valuation and asset components. Refer to the AMP for detailed information on component materials and quantities.

<https://www.nelson.govt.nz/repository/libraries/id:2r883m1me1cxbyryo0mp/hierarchy/1Your%20Council/A-Z%20Plans%2C%20Policies%2C%20Strategies/A-E/Activity%20Management%20Plan/Water-Supply-Activity-Management-Plan-2024-2034-Final.pdf>

Water Asset Valuation									
Asset Category	June 2024				% Chg in Depr	June 2023			
	Quantity	RV	DRV	Depr		Quantity	RV	DRV	Depr
	km/units/Ha	(\$)	(\$)	(\$)		km/units/Ha	(\$)	(\$)	(\$)
Reticulation	361.88	200,606,716	100,801,978	2,487,794	8.9%	354.33	188,431,129.83	95,433,618.87	2,331,554.02
Trunk Mains	45.94	66,757,907	27,023,683	912,398	6.9%	45.40	64,354,811.29	26,506,645.95	881,810.85
Maitai Pipelines	16.79	49,835,439	21,661,462	699,761	-0.2%	17.25	50,281,300.41	21,943,301.09	698,373.87
Roding Pipeline	10.70	12,314,373	5,504,886	147,016	15.9%	10.67	11,905,829.02	5,428,480.07	142,812.58
Maitai Water Supply Scheme		\$38,833,026	\$23,126,908	\$426,449	7.0%	-	37,771,643.17	23,503,789.06	398,408.02
Roding Dam		\$5,266,235	\$935,604	\$74,176	1.5%	-	5,122,298.56	949,435.94	73,090.59
Treatment Plant		35,650,183.38	19,788,858.61	1,271,218.53	2.8%	-	34,675,793.58	20,484,556.46	1,236,473.62
Tunnels	3.47	\$20,763,098	\$17,427,776	\$93,632	3.0%	3.47	20,148,566.00	17,001,081.00	90,883.00
Reservoirs and Tanks	51.00	30,189,433.52	21,255,502.58	301,894.34	1.7%	51.00	29,748,313.60	21,039,595.24	296,735.30
Pump Stations	13.00	8,664,023.08	4,534,078.23	297,916.36	0.7%	13.00	8,427,218.24	4,600,680.53	295,756.49
Pressure Reducing / Control Valves (V1)	59.00	1,419,378.68	697,476.52	37,323.64	4.2%	57.00	1,358,638.28	689,424.41	35,816.83
Air & Non Return Valves (V1)	207.00	1,128,233.89	503,985.64	30,317.24	6.4%	200.00	1,057,817.61	478,355.40	28,486.27
Gate Valves (V2)	4,676.00	12,507,036.84	7,436,134.87	184,012.91	4.7%	4,559.00	11,787,902.43	6,986,424.43	175,829.66
Manholes	110.00	608,148.25	345,808.81	7,148.15	2.1%	111.00	595,513.70	346,293.43	7,001.06
Hydrants	2,726.00	11,275,869.07	5,726,004.17	138,187.87	4.3%	2,690.00	10,797,630.38	5,470,027.42	132,437.06
Meters	21,525.00	6,272,934.95	4,194,695.47	301,953.06	2.7%	21,565.00	6,109,082.75	4,083,165.62	294,027.55
Customer Connections	21,570.00	41,548,679.91	20,148,150.72	519,358.50	3.0%	21,610.00	40,338,371.87	19,988,185.70	504,229.65
<b>Total</b>		<b>543,640,717</b>	<b>281,112,993</b>	<b>7,930,556</b>			<b>522,911,861</b>	<b>274,933,061</b>	<b>7,623,726</b>

**Asset Condition**

- Asset condition varies with material, age and in-service conditions. Background information can be found in the AMP. The pipe renewal programme has a focus on replacing the black asbestos cement water mains as soon as possible.

**Best Estimate of Condition of Black Asbestos Cement Watermains**

	Very Good	Good	Fair	Poor	Very Poor	Total
Metres Length	276	598	1,003	1,159	6,164	9,200
%	3	6.5	10.9	12.6	67	100

**Best Estimate of Condition of White Asbestos Cement Watermains**

	Very Good	Good	Fair	Poor	Very Poor	Total
Metres Length	63,181	11,882	10,279	6,129	2,829	94,300
%	67.0	12.6	10.9	6.5	3.0	100

**Best Estimate of Condition of Cast Iron Watermains**

	Very Good	Good	Fair	Poor	Very Poor	Total
Metres Length	-	-	6,116	35,774	6,650	48,540
%	-	-	12.6	73.7	13.7	100

### **Water Supply Asset Criticality**

Council has undertaken a comprehensive risk assessment of the water supply network.

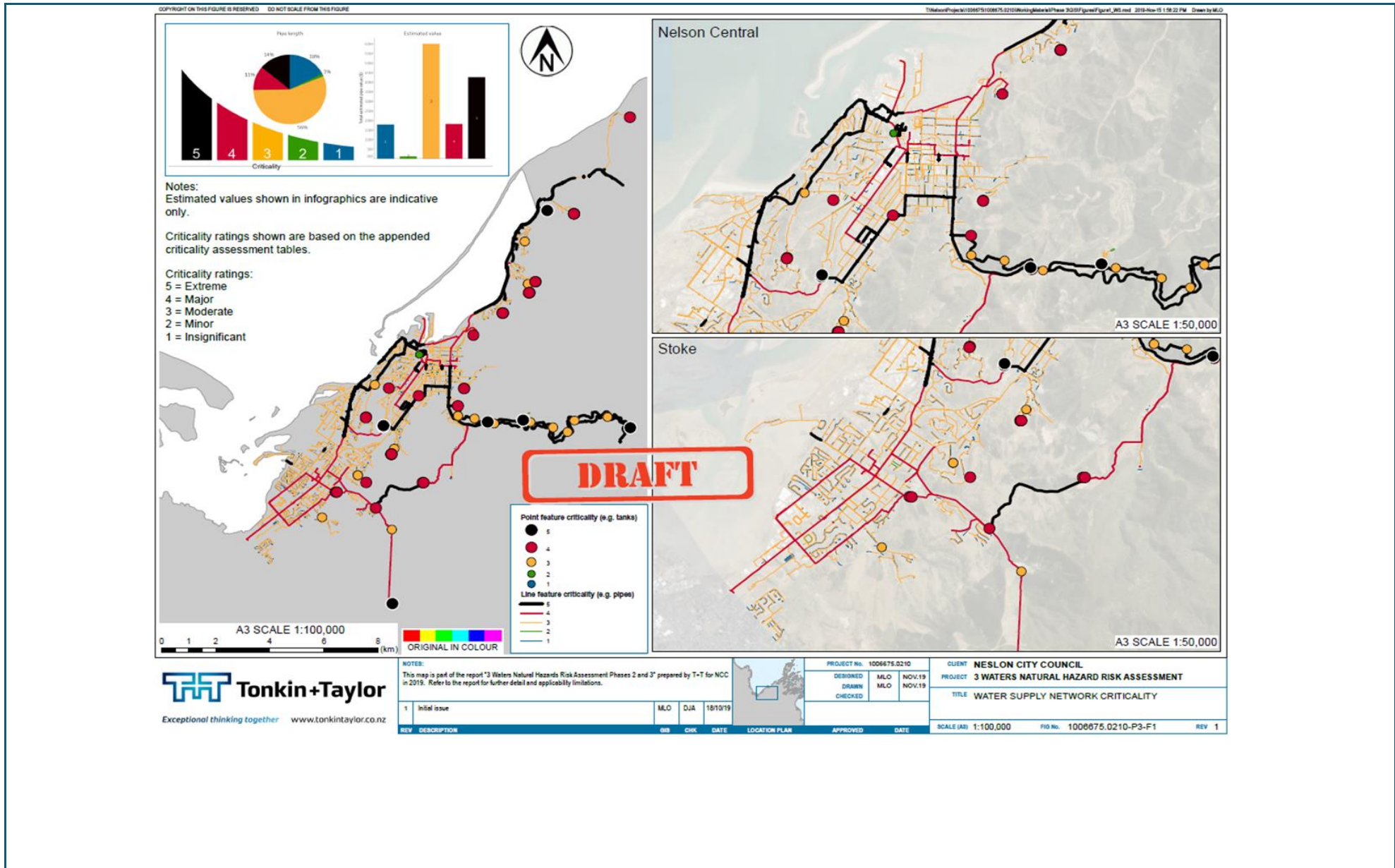
A risk framework based on the NCC framework was developed by consultants who then used a GIS portal to show identified hazards relative to the network.

This information will be used to prioritise mitigation or adaptation works to support the ongoing supply of water in the event of a serious event.

Critical assets have been identified as:

- Headworks including dams and intakes
- Raw water trunk mains
- Raw water pump stations
- Water Treatment Plant including Clearwater Reservoir
- Treated water trunk mains
- Treated water pump stations
- Reservoirs

The following plan shows the results of the work done to identify the criticality of the major Water Supply Assets.



## **Water Supply Asset Renewal**

Council's Water Supply AMP 2024-34 sets out the renewal strategy for the Activity and theoretical service lives of the Assets. Council uses the theoretical asset lives in tandem with asset condition – as represented by failures and condition assessment, to guide renewal planning.

The theoretical service lives are modelled in the following graphs of renewal years for the pipe network. The longer-term renewal programme and funding in the infrastructure strategy is largely based on the theoretical service life. The more immediate renewal programmes in the asset/activity management plans are developed by also taking into account increasing repair costs, loss of service impacts, efficiencies from joint renewal of assets in common locations and to respond to demands of growth.

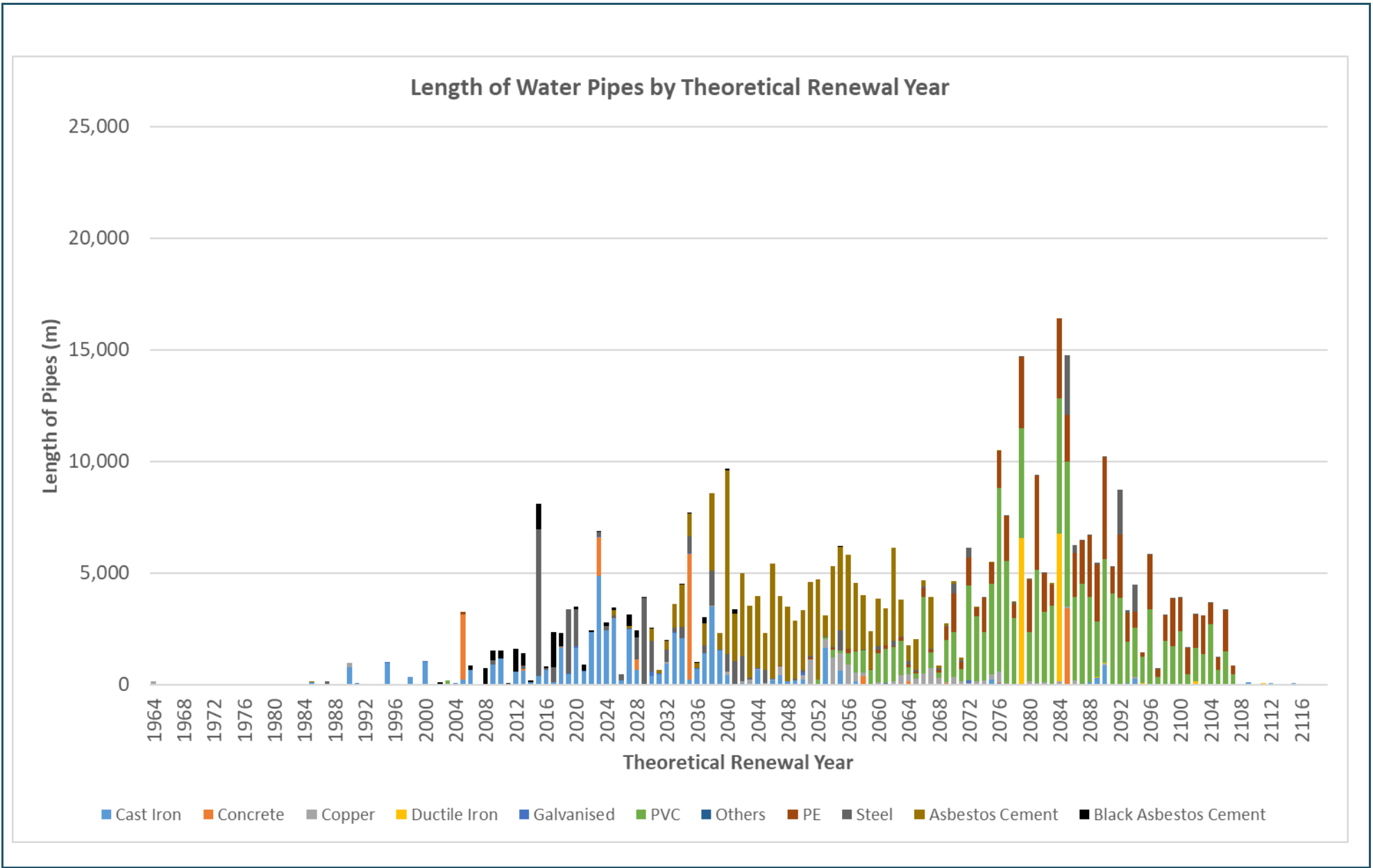
Council also monitors the performance of different asset materials - particularly to identify those that may not be meeting the theoretical service life for the asset type. These assets are then programmed for replacement as funding becomes available.

Expenditure on asset renewals is programmed to increase over the 2024-34 term with Council also signalling that expenditure on renewals will increase in future asset/activity management plans to reach approximately 75% of capital expenditure.

Renewal strategies are based on the following general approaches:

- Replacement of the full pipeline for material classes identified as prone to multiple failures.
- Replacement in parts where ground conditions lead to reduced service lives in discrete sections.
- Replacement as part of upgrades required for growth.
- Replacement as part of co-construction with other utilities.
- Increasing use of detailed condition assessment and pressure reduction to maximise service life of pipelines and fittings.

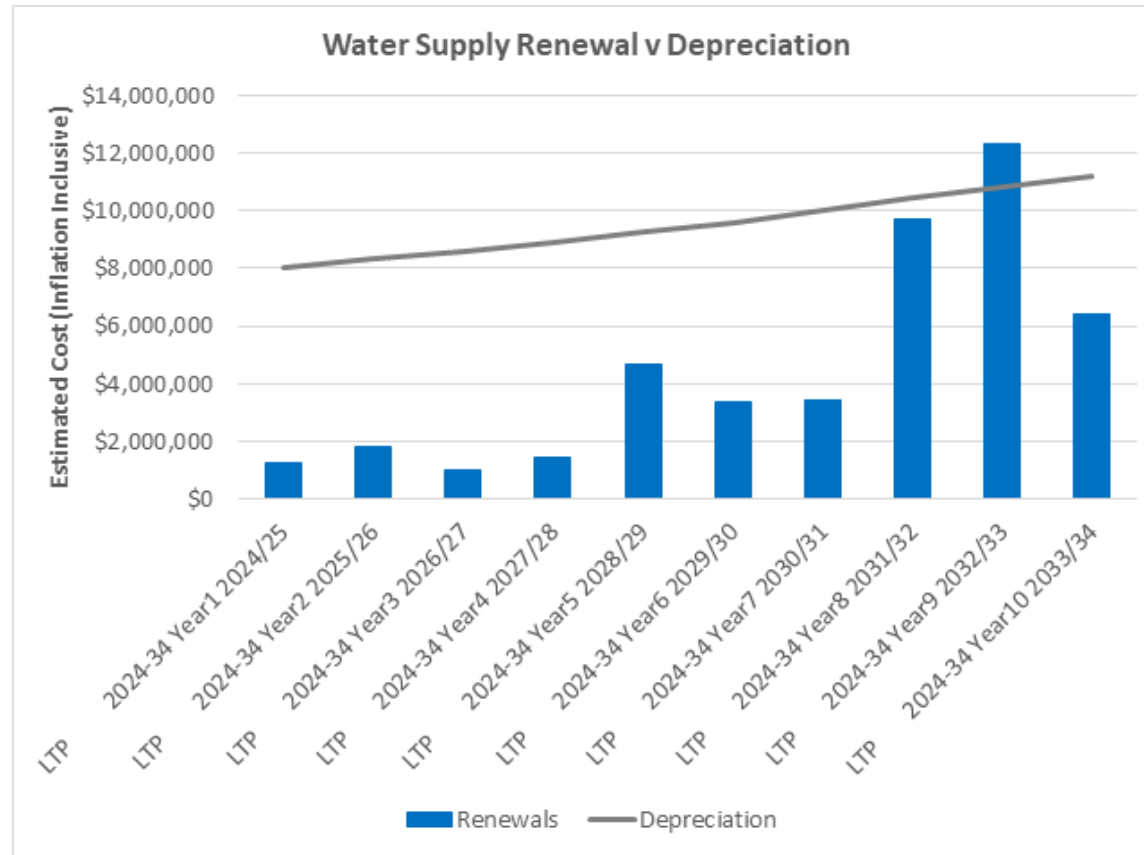
The following graphs and tables are taken from the AMP and show the expected renewal profile for the piped network and details of the expenditure and depreciation.



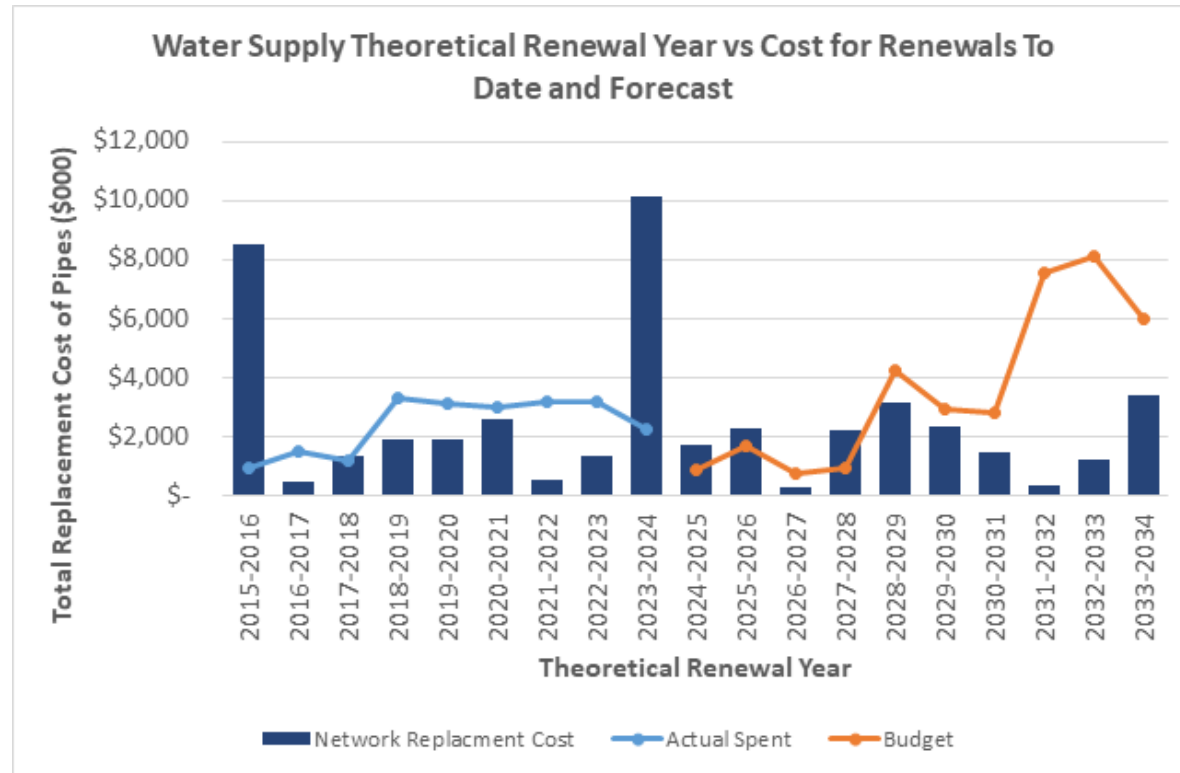
### **Forecasts of depreciation and Renewals**

- The following tables set out the proposed renewal expenditure
- The forecast of depreciation relates to the current value and base life of existing water supply assets.
- Historically, the estimated depreciation of water assets, based on expected asset life, has exceeded the value of water renewals. The reason for this is that where the renewal of a water asset is required, it will often be replaced by an asset with greater capacity which is considered as a level of service or growth improvement, rather than a renewal.
- The peak in years 8 and 9 are due to the timing of WTP membrane renewals.

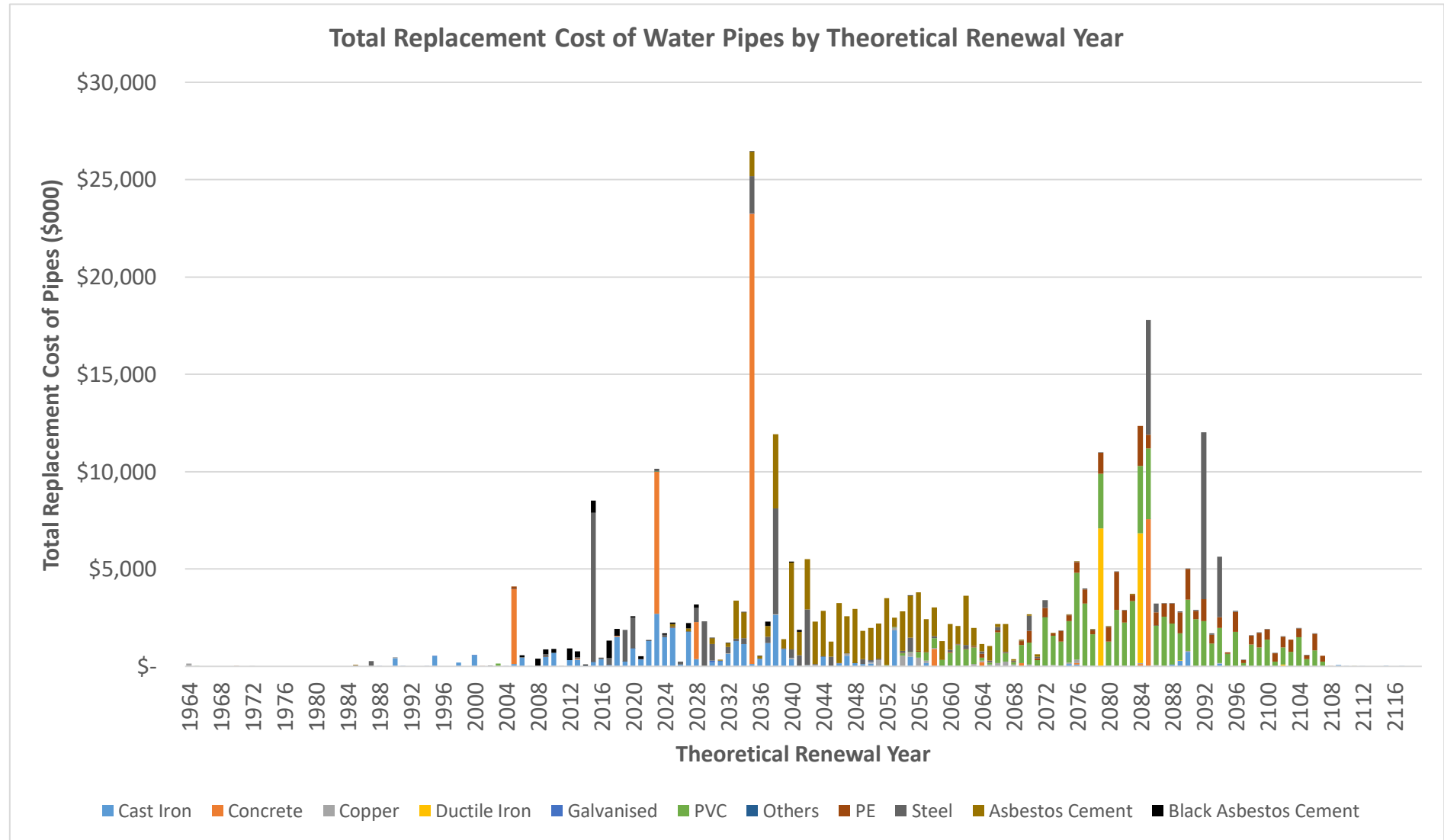
**Graph of Water Supply Activity Renewals and Depreciation**



Graph of Water Supply Pipeline Renewals – by Year and Cost



Graph of Replacement Cost of Water Supply Pipeline by Theoretical Renewal Year



**Working Life of Water Reticulation Assets (Years)**

Type	Low Pressure	High Pressure	Trunk Main	Maitai Pipeline	Roding Pipeline
Asbestos Cement (Black)	80	70	65		
Asbestos Cement (Fibrolite)	80	70	65	70	80
Ductile Cast Iron	110	95	90	90	
Pit Cast Iron	120	105	100		
Spun Cast Iron	100	90	85		
Concrete	70	65	60	72	85
Copper	90	80	75		
Galvanised Iron	70	55	50		
HDPE	85	70	65		
PVC	85	70	65	70	85
Concrete Lined Steel	90	80	75	72	85
Pitch Lined Steel	90	80	75	72	

- The nominal working life of the reticulation pipework is based on a survival model prepared on the basis of experience of 10 European water supply systems. The results of the model show good agreement with the experience to date in Nelson City.
- High pressure reticulation was assigned a slightly shorter life because of the greater working stresses the pipe and fittings will experience.
- Trunk mains have been assigned a shorter life again, because of the more serious implications of a pipe failure and the consequent need for a higher standard.
- Fixed structures such as dams, tunnels and reservoirs have been assigned a life expectancy of 100-200 years.
- Pump station structures have been assigned a life expectancy of 100 years, pipes/valves a life of 70 years, and pumps/control equipment 20 years.
- The construction year for each individual section of pipe has been researched from field books, plans and other records. This information has been entered into the database to allow the age of the pipes to be calculated.

**Working Life of Water Assets (Years)**

	Life (Years)
<b>Manholes</b>	
Standard < 1250 dia	84
Standard >= 1250 dia	72
Flow measuring manholes	50
Meter manhole	80
<b>Valves</b>	
Air/NRTN	35
Pressure Reducing	35
Gate valves <250 dia	84
Gate valves >=250 dia	72
<b>Hydrants</b>	
<250 dia	84
>=250 dia	72
<b>Maitai Water Supply Scheme</b>	
Dam and platform	200
Concrete structures (spillway etc)	100
South Supply Intake	50
Roding Dam	100+
<b>Other</b>	
Reservoirs	100
Tunnels	100
Stoke reservoir overflow pipe	80
Manifold and meter boxes	80
Service laterals	80
Meters	15

## Renewal Prioritisation and implementation

The following table outlines the asset management approach to prioritising and implementing specific renewals within the network.

Strategy	Objective/ Description
Identification of Renewal Needs	<p>To avoid a concentration of asset renewals in a short window of time, when they all reach the end of their life, renewals are set by:</p> <ul style="list-style-type: none"> <li>• Potential development in the city</li> <li>• Other Council projects and the need to consider reduction of greenhouse gas emissions through co-construction projects.</li> </ul> <p>e.g. the condition of water supply pipelines will be inspected prior to major road works to identify the risk of the road being damaged by pipeline failure or the need for pipeline replacement in the short/medium term. Pipelines in poor condition will be programmed for replacement prior to or in conjunction with the road works.</p> <p>Issues identified with asset by location and or materials through condition reports, maintenance records (asset failure and expenditure history), request for service (RFS) records, and observations of public, staff and contractors.</p> <ol style="list-style-type: none"> <li>1) Critical assets just before they fail.</li> <li>2) Others after four or more unexpected failures over the previous five years (sum of all asset of same material and age for the street) and two breaks occurred on the same asset (individual pipe section) or breaks on the same material on a street being equivalent to one break per 100m or less.</li> <li>3) Assets that do not meet required fire flow demand and have two or more failures over the past five years.</li> <li>4) Alignment with other utility renewals or upgrades. Minimise projects where excavation to renew the water supply asset alone would lead to increased discharge of greenhouse gases or significant disruption to the community.</li> </ol>
Project options	Decision Criteria are weighed. Then Business Cases which consider benefits (aligned with the Decision Criteria), dis-benefits, cost, timescale and risks are compared to determine whether to proceed with a renewal or which renewal option to take.
Prioritisation of Renewal Projects	Decisions on renewal works consider the short and long-term effects on the operating and structural integrity of the system and the opportunity for greenhouse gas emission reduction.
Design	<p>Construct renewal works each year. These are generally designed in advance to maintain level of service.</p> <p>Renewal works are designed and undertaken in accordance with Nelson Tasman Land Development Manual that stress the use of long life materials.</p> <p>Investment is made in innovative new technologies to rehabilitate existing reticulation where appropriate, rather than excavate and replace.</p>
Sustainability	Develop resilient infrastructure and reduce the impact on the environment from the renewal activity.
Climate change	<p>Use of materials that reflect reduced GHG emissions will be prioritised. This includes consideration of country of origin of materials and whether equivalent materials can be sourced locally or close to NZ.</p> <p>Renewal projects will consider the impacts of climate change and sea level rise to develop the most sustainable solution.</p>
Deferred Renewals	<p>The quantity and impact of deferred renewals (if any) is tracked</p> <p>The Council recognises that although the deferral of some items on renewal programmes will not impede the operation of many assets in the short term, repeated deferral will create a future Council liability. As Council currently funds asset renewals from depreciation deferred renewals are not expected.</p>

## Wastewater

### Quantity and Valuation

The following table sets out the most recent asset valuation and asset components. Refer to the AMP for detailed information on component materials and quantities.

<https://www.nelson.govt.nz/repository/libraries/id:2r883m1me1cxbyryo0mp/hierarchy/1Your%20Council/A-Z%20Plans%2C%20Policies%2C%20Strategies/A-E/Activity%20Management%20Plan/Wastewater-Activity-Management-Plan-2024-2034-Final.pdf>

Wastewater Asset Valuation									
Asset Category	June 2023				Movement	Jun-24			
	Quantity	RV	DRV	Depr		Quantity	RV	DRV	Depr
	km/units/Ha	(\$)	(\$)	(\$)		km/units/Ha	(\$)	(\$)	(\$)
Reticulation Mains	344.0	315,807,889.9	162,301,135.0	3,857,211.6	11.2%	349.1	331,816,741.6	165,764,510.2	4,137,443.3
Trunk Mains	36.1	38,498,154.3	15,422,508.5	513,459.6	8.9%	35.3	38,855,019.1	15,272,152.5	522,613.3
Swallow Mains	5.2	7,044,242.1	583,030.9	111,422.5	-8.4%	4.7	6,611,101.2	536,041.8	102,044.8
Rising Mains	25.3	47,332,662.3	12,010,191.9	799,821.9	49.3%	26.5	48,310,258.2	11,458,408.0	816,332.4
Access points	1,114.0	1,707,207.1	1,186,329.7	21,352.7	10.3%	1,255.0	1,883,690.3	1,326,999.1	23,556.7
Manholes	7,232.0	98,963,074.0	51,864,098.4	1,219,774.0	3.9%	7,281.0	102,672,417.2	53,690,109.0	1,265,353.8
Tanks	15.0	140,013.8	66,383.4	1,750.2	3.0%	16.0	153,903.2	69,826.9	1,803.6
Valves	248.0	780,050.0	359,403.7	15,281.7	44.2%	237.0	794,754.4	411,109.5	15,577.8
Neale Park Retention Tank	1.0	1,066,918.4	713,615.8	13,336.5	3.0%	1.0	1,099,459.4	721,609.6	13,743.2
Pump Stations	27.0	14,491,120.8	4,255,784.0	406,840.4	58.9%	29.0	22,964,109.2	12,788,172.1	646,599.9
Neale park Pump Station	1.0	12,701,324.1	11,706,619.7	248,676.1	2.8%	1.0	13,058,231.3	11,770,552.6	255,663.9
Corder Park Pump Station	1.0	10,825,219.4	9,749,167.8	179,341.9	2.8%	1.0	11,129,408.1	9,838,737.9	184,381.5
Wakapuaka Treatment Plant	1.0	39,424,007.6	23,974,597.4	785,054.0	1.8%	1.0	40,531,822.3	23,978,930.2	798,969.6
<b>Total</b>		<b>588,781,884</b>	<b>294,192,866</b>	<b>8,173,323</b>	<b>14.5%</b>		<b>619,880,916</b>	<b>307,627,159</b>	<b>8,784,084</b>

### **Condition Assessment**

Within the reticulation network, condition assessment is undertaken on a selective basis. Typically asset issues are identified through a variety of means, this subsequently leads to a condition assessment to determine if further steps are required. The primary condition assessment tool in the reticulation network is CCTV.

Whenever the maintenance contractor is working on pipe repairs a report is made and entered into the Asset Management System. This is used to understand areas of the network with issues and allow relationships between pipe types, construction techniques, age and geology to be developed.

Significant assets (the NWWTP, Atawhai Rising Main etc.) require a more structured approach. In the case of these assets condition assessments tend to occur on a scheduled basis or as new technology becomes available.

### **Pump Station Condition**

The condition of the pump stations are detailed below.

The typically 'moderate' condition of the pump stations is mainly due to their age, and an extensive renewal programme is underway to replace electrical and pumping components as required.

**Pump Station Performance as at June 2023**

Name	Electrical	Pumping
Neale Park	1	1
Cemetery Point	3	2
Weka Street	3	2
Vanguard Street	2	3
Russell Street	1	2
Beach Road	1	2
Quarantine Road	2	2
The Glen	3	3
Todds Bush	3	2
Marybank	3	2
Corder Park	1	1
Brooklands	3	2
Clouston Terrace	3	2
Paru Paru Road	3	3
Akersten Street	3	2
Vickerman Street	3	2
Skating Rink	2	3
Grace Street	3	2
Point Road	3	3
Martin Street	1	2
Rainier Street	1	2
Monaco View	3	2
Venice Place	2	2
Exeter Street	1	1
Airport Storage	3	2
Awatea**	1	1

Performance rating based on Operations observations  
 1 = Very Good 2 = Good 3 = Moderate 4 = Poor 5 = Very Poor  
 \*\* became operational in October 2024

**Pump Station Condition as at June 2023<sup>2</sup>**

	Name	Electrical		Pumping		Structural	
		Year Upgraded	Condition	Year Upgraded	Condition	Year Upgraded	Condition
1	The Glen	2004	3	2004	3	2004	1
2	Todds Bush	2003	3	2006	3	1985	2
3	Marybank	2023	2	2020/2007	1/3	1969	3
4	Corder Park	2016	1	2016	1	2016	1
5	Brooklands	2003	3	2019	2	1969	3
6	Cemetery Point	2003	3	2019	2	1979	2
7	Clouston Bridge	2005	3	2006	2	1985	3
8	Neale Park	2019	1	2019	1	1989	1
9	Weka St	2002	3	2004	3	1984	2
10	Vanguard St	2022	3	2022/2006	1/3	1986	2
11	Paru Paru Road	2020	3	2006	3	1995	3
12	Akersten St	2004	3	2006	3	1986	3
13	Vickerman St	2004	3	2006/2009	3	1970	3
15	Russell St	2019	1	2015	2	1980	3
16	Beach Road	2020	1	2014	2	1950	3
17	Skating Rink	2004	3	2014	2	1960	3
20	Quarantine Road	2005	3	2006	2	1981	2
23	Grace Street	2004	3	2004	3	1976	2
24	Point Road	2004	3	2004	3	1976	3
25	Martin St	2023	1	2013/2010	3	1976	3
26	Rainier St	2023	1	2010	3	1976	3
27	Monaco View	2001	3	2001/2004	2	2001	2
31	Venice Place	2013	2	2009	2	2009	1
	Exeter	2018	1	2018	1	2018	1
	Airport Storage	2001	3	2001/2004	3	2001	2
33	Awatea	Installed Oct 2024	1	Installed Oct 2024	1	Installed Oct 2024	1

Condition rating as per the NZ infrastructure Asset Grading Guidelines 1999  
1 = Very Good 2 = Good 3 = Moderate 4 = Poor 5 = Very Poor

<sup>2</sup>Structural Condition for the Weka St, Vanguard St, Paru Paru Rd, and Quarantine pump stations were assessed in 2022 and updated in this table, the rest are as per the 2021 – 2031 Activity Management Plan

### **Confidence Rating in Attributes, Condition and Performance**

The Council has generally good confidence in the attributes, condition and performance data as outlined in the table below. The confidence rating will be increased as resource become available. Examples of this are:

- The ongoing updating of the asset register of the pipe assets when repairs are carried out and the attributes are compared with the asset register attributes.
- The ongoing modelling of the reticulation where increased areas within the city are modelled with the associated increase in the accuracy of the performance of the network.

**Confidence Rating in Attributes, Condition and Performance**

Attribute	All Data Estimated	Significant Data Estimated	50% Estimated	Minor Inaccuracies	Accurate	Comment
<b>Attributes</b>						
Retic - Size						The data was captured using photogrammetry in 1994 and progressively delivered over the following three years. Nelson City Council staff carried out accuracy checks on the co-ordinate data supplied, searched all the engineering plans and field books for information on pipe alignment, diameter, material and age and entered this information into the Geographical Information System
Retic - Depth						
Retic - Material						
Retic - Install Date						
Retic - Location						
Retic - Pipe Length						
Wastewater Treatment Plant – all components						High level of knowledge of the treatment plant through proactive ongoing monitoring. Site records (as-built drawings, asset mgmt. info, etc) could be improved upon.
Pump Stations– all components						High level of knowledge on the pump stations through proactive ongoing monitoring. Site records (as-built drawings, asset mgmt. info, etc) could be improved upon.
<b>Condition</b>						
Reticulation pipes (100 – 200mm dia gravity)						Huge network. Not cost effective to inspect all.
Gravity Trunk Mains						Huge network. Not cost effective to inspect all.
Rising Mains						Particular challenges associated with pressure pipes. Full physical inspection often impossible.
Swallow Mains						Particular challenges associated with pressure pipes. Full physical inspection often impossible.
Manholes						Huge network. Not cost effective to inspect all.

Pump Stations– all components			High level of knowledge known on the majority of pump stations due to maintenance records
Electronics– all components			
Wastewater treatment plant			Upgraded in 2008. High level of knowledge due to maintenance records
Outfall			
<b>Performance</b>			
Reticulation			Limited inspections to date
Trunk Mains			
Rising Mains			
Swallow Mains			
Manholes			Limited inspections to date
Pump Stations– all components			
Electronics			
Waste water treatment plant – all components			
Outfall			

## **Wastewater Asset Criticality**

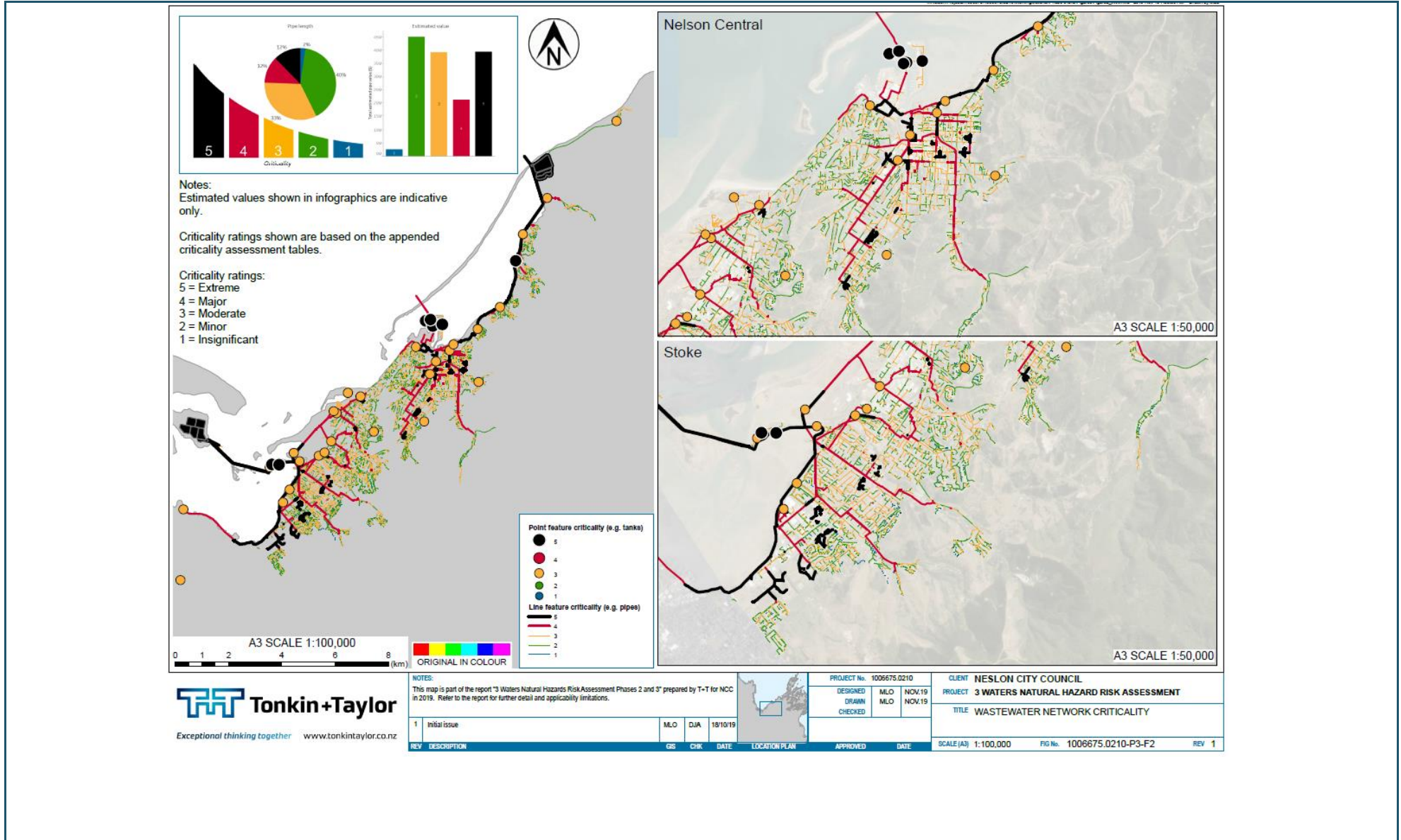
Council has undertaken a criticality assessment for physical assets under the wastewater activity as part of a wider Natural Hazards Risk Assessment for the 3 Waters Infrastructure within the city. For this assessment a criticality matrix was developed to align as closely as practical with the Council's corporate consequence matrix. The range of impacts criteria included:

- Safety.
- Health.
- Asset Performance / Service Delivery.
- Environmental / Historical / Cultural.
- Financial.
- Political / Community / Reputational.
- Proximity of Asset to other Infrastructure.
- Critical Facilities (Serviced by asset).

Assets that are generally considered critical within the Nelson City Council wastewater system include:

- All pump stations.
- Rising mains.
- Trunk mains.
- The wastewater treatment plant.
- Assets within an area widely prone to a specific hazard e.g. liquefaction.

The following plan shows the results of work done to identify the criticality of the major Wastewater Assets.



## **Wastewater Network Asset Renewal**

Council's Wastewater AMP 2024-34 sets out the renewal strategy for the Activity and theoretical service lives of the Assets.

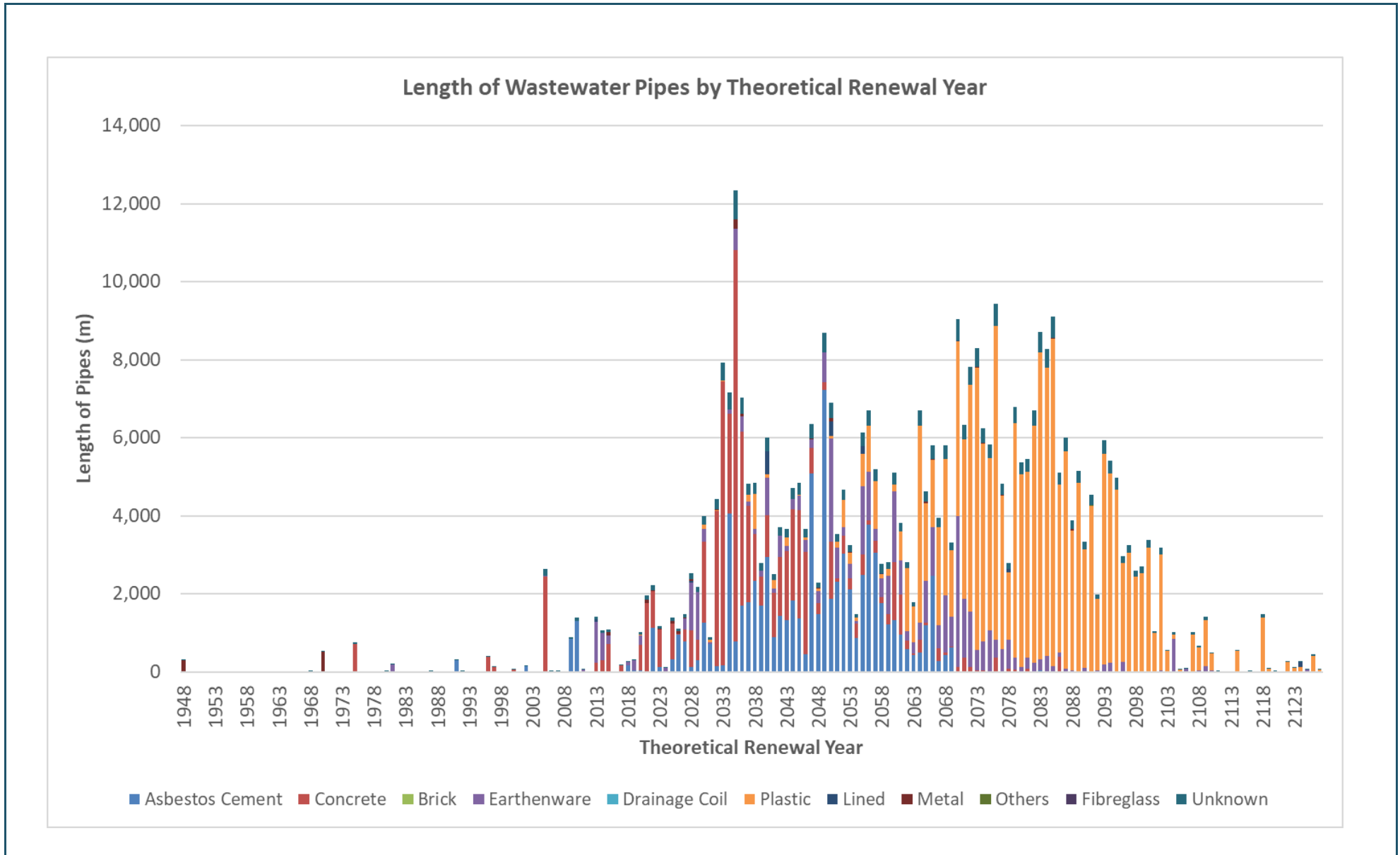
The theoretical service lives are modelled in the following graphs of renewal years for the pipe network. The thirty year infrastructure strategy sets out the longer term renewal forecast for the wastewater activity. The overarching strategy is based on renewing the network just in time to avoid disruption to the service and as demands of growth or other asset renewals offer opportunities to reduce both cost and community disruption.

The more immediate renewal programmes in the asset/activity management plans are developed by also taking into account the following when prioritising specific renewals:

- Potential development in the city.
- Other Council projects.
- Issues identified with asset by location and or materials.
- Condition reports, maintenance records (asset failure and expenditure history), wastewater infiltration studies, request for service (RFS) records, and observations from public, staff and contractors.
- Capacity issues within the network.
- Asset criticality.
- Future asset renewal "bow waves" – the need to bring forward or defer some renewals.

Expenditure on asset renewals is programmed to increase over the 2024-34 term with Council also signalling that expenditure on renewals will increase in future asset/activity management plans to reach approximately 75% of capital expenditure.

The following graphs and Tables are taken from the AMP and show the expected renewal profile for the piped network and details of the expenditure and depreciation.



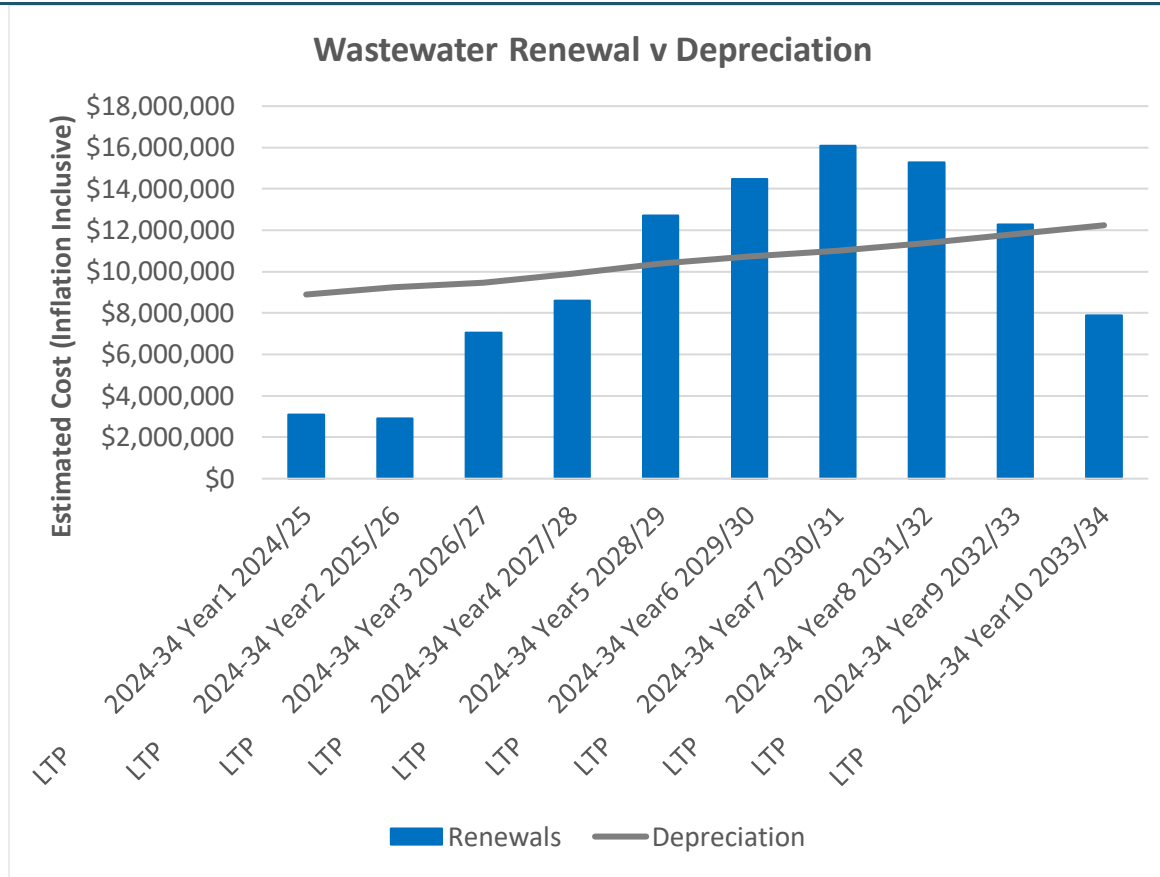
### **Forecasts of depreciation and Renewals**

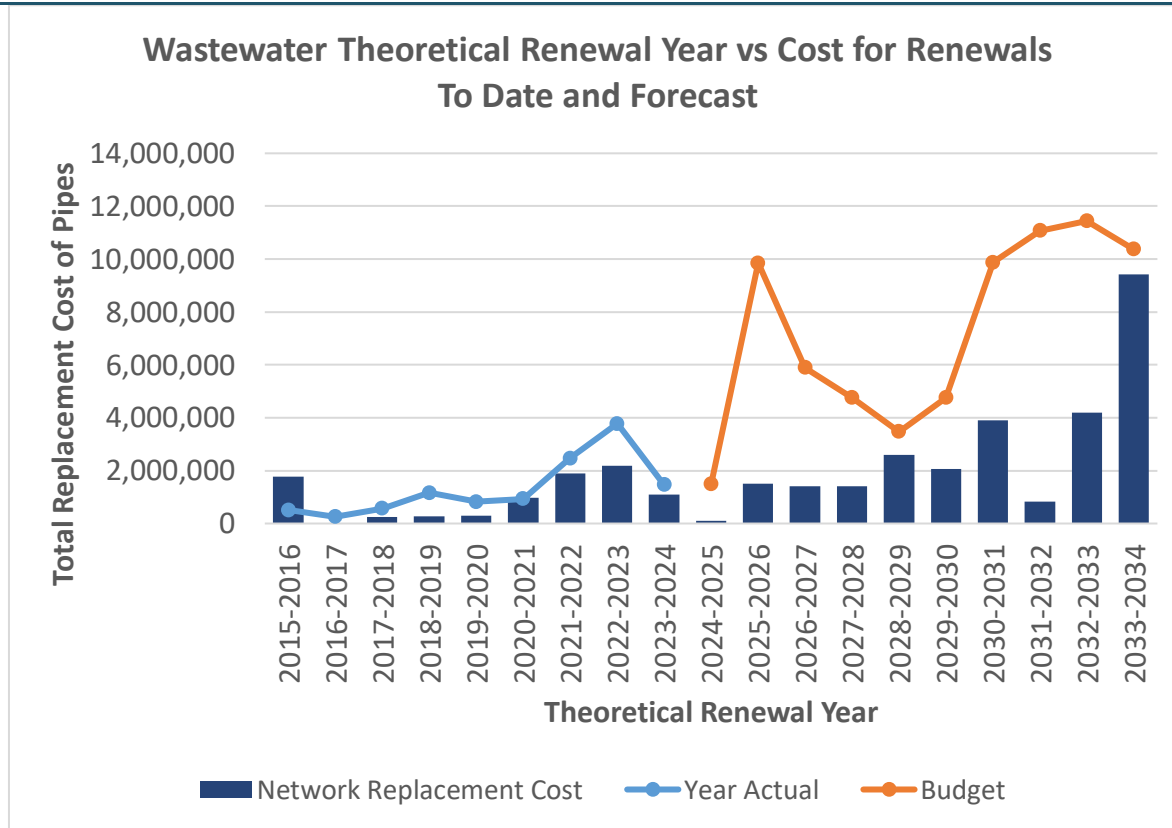
The following tables set out details of the proposed renewal expenditure.

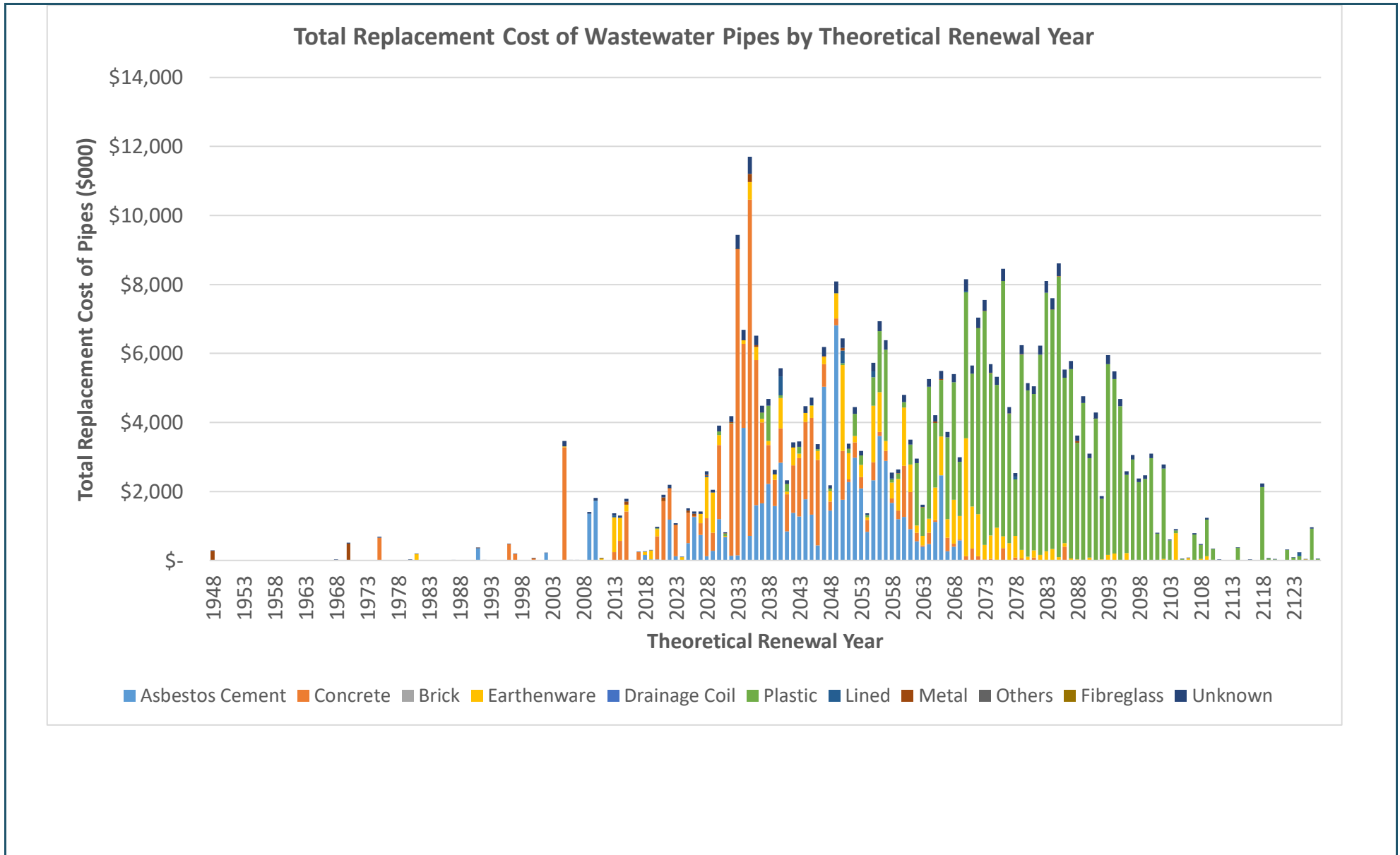
The forecast of depreciation relates to the current value and base life of existing wastewater assets.

Historically, the estimated depreciation of wastewater assets, based on expected asset life, has exceeded the value of wastewater renewals. One reason for this is that where the renewal of a wastewater asset is required, it is sometimes replaced by an asset with greater capacity - which is considered as a level of service improvement, rather than a renewal.

The peak in years 5 – 9 are due to increased expenditure on the Atawhai rising main renewal and upgrade.







The table below shows typical useful lives of wastewater network pipelines; this has been derived from industry knowledge and local performance data.

**Working Life of Wastewater Reticulation Assets**

Material	Good Soil (Yrs)	Average Soil (Yrs)	Poor Soil (Yrs)	Pressure (Yrs)
Black Asbestos Cement	80	70	65	40
Asbestos Cement	80	70	65	40
Blue Brute Pipe	80	80	80	N/A
Ductile Cast Iron	65	55	50	40
PitCast Iron	85	75	70	40
Spun Cast Iron	90	80	75	40
Cast Iron	80	70	60	N/A
Concrete (InsituFORM lined)	70	70	70	40
Concrete	85	75	70	45
Earthenware	120	110	105	N/A
Earthenware Synthetic Lined (ESWL)	120	120	105	N/A
Fibreglass	90	90	90	60
MDPE/HDPE	105	105	105	60
PVC	80	80	80	50
Steel Concrete Lined	85	75	70	45
Unknown	85	75	70	N/A
Atawhai Rising Main Life	N/A	N/A	N/A	72
Soil condition – Poor refers to low lying sandy areas, subject to salt water infiltration. – Average soil conditions are gravel areas – Good soil condition are clay areas				

**Asset Lives Pump Stations (Years)**

Component	Structure	Steelwork	Pump	Electrical	Valves	Telemetry	Flow Meters	Biofilters
Life	50	30	30	15	30	10	10	20

## Renewal identification and strategies

The thirty year infrastructure strategy sets out the longer-term renewal forecast for the wastewater activity. The overarching strategy is based on renewing the network in a timely fashion to avoid disruption to the service and as demands of growth or other asset renewals offer opportunities to reduce both cost and community disruption.

### Renewal Selection Process

Aspect	Objective/ Description
Prioritise Renewals	<p>To avoid a concentration of asset renewals in a short window of time, when they all reach the end of their life, additional factors are considered including:</p> <ul style="list-style-type: none"> <li>• Potential development in the city.</li> <li>• Other Council projects.</li> <li>• Issues identified with asset by location and or materials.</li> <li>• Condition reports, maintenance records (asset failure and expenditure history), wastewater infiltration studies, request for service (RFS) records, and observations from public, staff and contractors.</li> <li>• Capacity issues within the network.</li> <li>• Asset criticality.</li> <li>• Future asset renewal “bow waves” – the need to bring forward or defer some renewals.</li> </ul>
Project options	<p>Decision Criteria are weighted. Then Business Case Options which consider benefits (aligned with the Decision Criteria), dis-benefits, cost, timescale and risks are compared to determine whether to proceed with a renewal or which renewal option to take.</p>
Design/ Construct	<p>Develop the design of the preferred option to a point where physical works services can be procured. Renewal works are designed and undertaken in accordance with the Nelson City Council Land Development Manual that stresses the use of long life materials.</p> <p>Investment is made in new technologies to rehabilitate existing reticulation where appropriate, rather than excavate and replace.</p>
Deferred Renewals	<p>The Council recognises that although the deferral of some items in the network will not impede the operation of many assets in the short term, repeated deferral will create a future liability.</p>

## Stormwater Quantity, Condition, Criticality, and Renewals:

### Quantity and Valuation

The following table sets out the most recent asset valuation and asset components. Refer to the AMP for detailed information on component materials and quantities.

<https://www.nelson.govt.nz/repository/libraries/id:2r883m1me1cxbyro0mp/hierarchy/1Your%20Council/A-Z%20Plans%2C%20Policies%2C%20Strategies/A-E/Activity%20Management%20Plan/Stormwater-Activity-Management-Plan-2024-2034-Final.pdf>

Stormwater Asset Valuation									
Asset Category	June 2023 Totals				% Chg in Depr	June 2024			
	Quantity	RV	DRV	Depr		Quantity	RV	DRV	Depr
	km/units/m4	(\$)	(\$)	(\$)		km/units/Ha	(\$)	(\$)	(\$)
Mains Up To 600mm	205.63	195,269,948.52	118,568,933.64	2,226,038.88	4.2%	205.77	203,315,013.87	123,130,814.03	2,318,487.40
Mains > 600mm	48.16	132,603,232.81	80,344,272.44	1,468,386.91	8.9%	49.56	144,590,570.33	89,463,529.40	1,599,311.57
Channels	3.37	1,386,897.55	656,303.22	15,562.56	2.0%	3.51	1,430,066.62	664,164.12	15,880.58
Culverts	2.45	8,836,690.74	5,354,010.50	92,687.04	22.7%	2.57	10,760,708.45	7,088,472.09	113,747.47
Rocks Rd Culvert	0.26	4,618,319.45	3,725,072.05	51,314.66	3.1%		4,759,178.19	3,785,698.41	52,879.76
Bank Protection	-	-	-	-	0.0%		-	-	-
Intakes	134.00	1,125,716.52	796,362.54	13,957.06	-0.5%	136.00	1,120,319.01	784,632.77	13,882.18
Manholes	5,209.00	36,982,113.64	26,436,395.27	410,069.09	6.0%	5,366.00	39,215,043.06	28,017,273.78	434,796.44
Outfalls	111.00	916,101.44	590,338.09	14,679.60	4.5%	119.00	947,267.82	619,388.54	15,343.43
Sumps	369.00	1,397,341.58	959,386.53	15,469.36	4.4%	374.00	1,459,464.22	989,403.27	16,155.17
Pump Stations	2.00	7,545,879.43	4,160,237.91	176,358.47	0.7%	2.00	7,757,918.64	4,173,069.65	177,660.91
Tide Gates	28.00	262,279.17	100,347.67	6,937.68	-1.7%	28.00	262,279.17	97,458.71	6,821.72
Detention Dams	27.00	36,606,686.83	34,629,794.79	107,716.70	0.0%	26.00	36,789,577.17	34,704,747.24	107,716.70
<b>TOTAL</b>		<b>427,551,207.67</b>	<b>276,321,454.66</b>	<b>4,599,178.01</b>	<b>5.9%</b>		<b>452,407,406.56</b>	<b>293,518,652.01</b>	<b>4,872,683.35</b>

Nelson City Council is responsible for a wide variety of assets that constitute the Stormwater System. The tables below show the stormwater assets managed by Utilities as of June 2023 including the lengths of pipe and open channel by material type for the Nelson City stormwater network.

Streams, roadways and open channels make up a significant part of the stormwater and flood protection network. The majority of the rivers and streams are managed by the flood protection activity with only a small section of the more urban streams and channels maintained by the stormwater activity.

**Mains, Channels, Culverts and Bank Protection (as at 2024 – 2034 AMP)**

<b>Asset Category</b>	<b>Km</b>
Asbestos Cement	0.15
Aluminium	0.11
Brick	2.0
Pit Cast Iron	0.005
Spun Cast Iron	0.017
Concrete	213.02
Drainage Coil	5.99
Euroflow	.03
Earthenware	2.70
Field Tiles	0.15
Galvanised	.008
High-density Polyethylene pipe	0.45
Medium Density Polyethylene	0.42
Mega Steel Pipe	0.096
Nexusflo	0.51
Polyethylene 100mm	.01
Perforated Concrete	.02
Polyvinyl Chloride	26.89
Steel Concrete Lined	0.04
<b>Grand Total</b>	<b>249.93</b>

	Quantity
	km/units/m4
<b>Mains Up To 600mm</b>	205.63
<b>Mains &gt; 600mm</b>	48.16
<b>Channels</b>	3.37
<b>Culverts</b>	2.45
<b>Rocks Rd Culvert</b>	0.26
<b>Bank Protection</b>	-
<b>Intakes</b>	134.00
<b>Manholes</b>	5,209.00
<b>Outfalls</b>	111.00
<b>Sumps</b>	369.00
<b>Pump Stations</b>	2.00
<b>Tide Gates</b>	28.00
<b>Detention Dams</b>	27.00

Stormwater detention basins have been reallocated between the Flood Protection and Stormwater Activities depending on whether they are located within the stormwater network, or along a watercourse.

**Stormwater Detention Basins (Vested)**

Location	Catchment	Date Installed
Springlea at Frenchay Drive	Oldham Creek	2016
Koura Road, Farleigh Street SHA	Oldham Creek	2019
Grampian Oaks	Saltwater Creek	2006
Station Reserve - Clarence Drive (New)	York Stream	2021
York Valley above Westley Place	York Stream	1967
Bishopdale Ave below No.70	York Stream	2022
Clifford Avenue above Cul-de-sac	York Stream	2000
Exeter Street Detention Reserve	Jenkins Creek	2018
The Ridgeway at Panorama Drive	Arapiki Stream	1996
Sanctuary Esplanade at Kingfisher Lane	Poorman Valley Stream	2016
Quail Rise Detention Basin (Western)	Poorman Valley Stream	2016
Quail Rise Detention Basin (Eastern)	Poorman Valley Stream	2016
Marsden Valley Homestead Block – 3 Ashley Terrace (New)	Poorman Valley Stream	2021
Ngawhatu sports field	Orphanage Stream	2000
Montebello Avenue	Orphanage Stream	2016
Piwakawaka Drive Detention Reserve	Orphanage Stream	2019
72 Sunningdale Drive (Stag Ridge, New)	Orphanage Stream	2021
Summerset Detention Basin – 3 Hillwood Street (Temporary).	Saxton Creek	2020
Iti Lane (Waimeha) Detention Basins x 6	Saxton Creek	2016
Ara o Nga Hekenga detention basin (New)	Saxton Creek	2021

The stormwater utility services contractor inspects the detention dams after floods, earthquakes or heavy rain and carries out minor maintenance.

In addition to stormwater detention dams there are a number of low impact stormwater collection and polishing features in the network. These are part of the stormwater quality improvement initiatives within the network.

**Stormwater Low Impact Design Features (LID)**

Location	Catchment	Description
Saddleback Road, Todds Valley	Todd Valley Stream	Mono-camber, no kerb or sumps. Runoff across esplanade reserve to stream and detention pond
26 – 38 Frenchay Drive, Atawhai, Nelson	Oldham Creek	Runoff from road drains into planted/landscaped open drain.
NMIT carpark 15 Alton Street, Nelson	Maitai River	Run off from carpark draining into planted gardens with Aquacell for soakage and storage
Harvey Norman 69 St Vincent Street, Toi, Nelson	York Stream	Run off from carpark draining into planted gardens (69 St Vincent Street) and Hynds sand filter (96 Vanguard Street)
52 Saxton Road West, Stoke (Placemakers)	Orphanage Stream	Run off from carparks draining into Gabion Baskets
743 – 783 Main Road Stoke, Stoke	Orphanage Stream	Runoff from road drains into planted swale drain
Sunningdale Drive, Stoke, Nelson	Orphanage Stream	Runoff from road drains into rain-garden outside numbers 8, 20 and 36. Also planted swale drain opposite to No 36.
Sanctuary Drive, Stoke, Nelson (Marsden Park)	Poorman Valley Stream	Runoff from road drains into planted/landscaped swale drains. Low speed design using tree pits.
Centennial Road Stormwater Pumping Station	Local stormwater catchment draining to the back beach, Tahunanui	Hynds Defender 3.0m diameter vortex filtration unit treats stormwater prior to discharge to the coastal environment

### **Pump Stations**

The Nelson City Council operates two stormwater pump stations; Centennial Road installed in 1999 and The Wood pump station installed in 2003. These large pump stations (Centennial \$890k and Wood \$2.05M) were installed due to excessive flooding in Tahunanui and The Wood areas respectively, especially during storm events that coincided with high tide. These two pump stations operate as follows:

- Centennial Road pump station discharges to a vegetated swale at the site that used to be the Modellers Pond. It operates on average 6x / year.
- The Wood pump station operates on average twice a year. The rising main runs across Neale Park to an outfall in the Haven.
- Recent changes to the Tahunanui Modeller's Pond include filling in the pond, and diverting the discharge from Centennial Road to a vegetated swale with an outlet to the CMA (Back Beach estuary). The installation of a stormwater treatment device was undertaken to improve pumped discharge quality.

### **Asset condition**

The Nelson City Council has stormwater pipe assets ranging from new to over 100 years old.

Inspections of a number of stormwater pipes in the network have shown them to be in generally good order where good quality materials were used and professional installation techniques followed. In these circumstances only minimal levels of wear and loss of service has been observed and most of pipes are therefore expected to exceed their estimated service life. However some pockets of poor quality pipe material and installation details have also been found, and generally pipes on steep hillslope terrain are more likely to have a lower expected base life.

### **Condition Assessment**

Historically asset monitoring to determine condition has been subjective, based on local knowledge and experience. Nelson City Council now has procedures to assess and report on asset condition via closed circuit television (CCTV) and failure mode analysis.

The cost of undertaking condition assessment can be relatively expensive but provides an evidential basis for decision making on renewals and upgrades. The need for inspection of assets with long economic lives is based on consequence of failure (criticality), remaining life and asset condition (structural and service grades). This is being further investigated through a renewal strategy for the stormwater Activity.

**Current Position on Condition Assessment**

Presently the following simple approach to condition assessment is being used: Whenever the maintenance contractor is working on pipe repairs a condition report is made and entered into the Asset Management System. It is anticipated that this database will be used to plot developing problem areas on a city wide basis and allow relationships between pipe types, construction techniques, age, slope and geology to be developed.

Increasingly stormwater pipes are being assessed for structural condition and performance through CCTV surveys. The outputs are being collated in a dashboard showing the location of the surveyed assets, and with links to the CCTV files. Some larger pipes and open channels have been inspected by drones.

Pipe samples will also be recovered, where unexpected failures occur, so that sophisticated condition assessment can be implemented and the data recorded on the Asset Management System.

Likewise channel repairs can be tracked through the INFOR database of work orders and a similar picture developed of higher risk areas.

The asset management system will be used as part of an Optimised Decision Making process. The level of sophistication will increase as the condition data base is developed.

The table below details an estimate of the condition of the reticulation.

**Condition of Components Estimates (as % of total)**

	Very Good %	Good %	Moderate %	Poor %	Very Poor %	Total
Reticulation	10	40	30	10	10	254km
Intakes	10	40	20	20	10	130
Sumps	20	30	15	15	20	365
Culverts	10	20	40	10	20	2.5 km
Channels	5	30	20	20	25	3.4km
Manholes	20	20	20	20	20	5,201
Tide Gates		30	20	40	10	34
Condition rating as per the New Zealand infrastructure Asset Grading Guidelines 1999 1 = Very Good 2 = Good 3 = Moderate 4 = Poor 5 = Very Poor						

Asset condition assessment initiatives:

- Ongoing field maintenance condition feedback
- Asset failure records
- Pipe sampling programmes
- Specific inspections and condition rating of assets

**Confidence rating in attributes, condition and performance**

The Council generally has moderate confidence (50% estimated to minor accuracies) in the processes for the attributes data, condition and performance of assets within the stormwater activity as indicated in the table below.

Attribute	All Data Estimated	Significant Data Estimated	50% Estimated	Minor Inaccuracies	Accurate	Comment
<b>Attributes</b>						
<b>Reticulation</b>						
Size						The data was captured using photogrammetry in 1994 and progressively delivered over the following three years. Nelson City Council staff carried out accuracy checks on the co-ordinate data supplied, searched all the engineering plans and field books for information on pipe alignment, material and age and entered this information into the Geographical information system.
Depth						
Material						
Install Date						
Location						
Pipe Length						

Pump Stations– all components				High level of knowledge known on both pump stations due to their recent installation.
<b>Condition - Structural</b>				
Reticulation				Increasing coverage of the network with CCTV survey
Intakes				
Sumps				
Culverts				
Manholes				Limited inspections to date.
Channels				
Tide Gates				
Pump Stations– all components				High level of knowledge known on both pump stations due to their recent installation.
<b>Condition – Service (Performance)</b>				
Reticulation				Stormwater network models in progress; CCTV surveys highlight performance issues such as blockages.
Intakes				
Sumps				
Culverts				
Manholes				Limited inspections to date.
Channels				
Tide Gates				
Pump Stations– all components				High level of knowledge known on both pump stations due to their recent installation.

## **Stormwater Asset Criticality**

Council has undertaken a criticality assessment for physical assets under the stormwater Activity as part of a wider Natural Hazards Risk Assessment for the 3 Waters Infrastructure within the city. For this assessment a criticality matrix was developed to align as closely as practical with the Council's corporate consequence matrix.

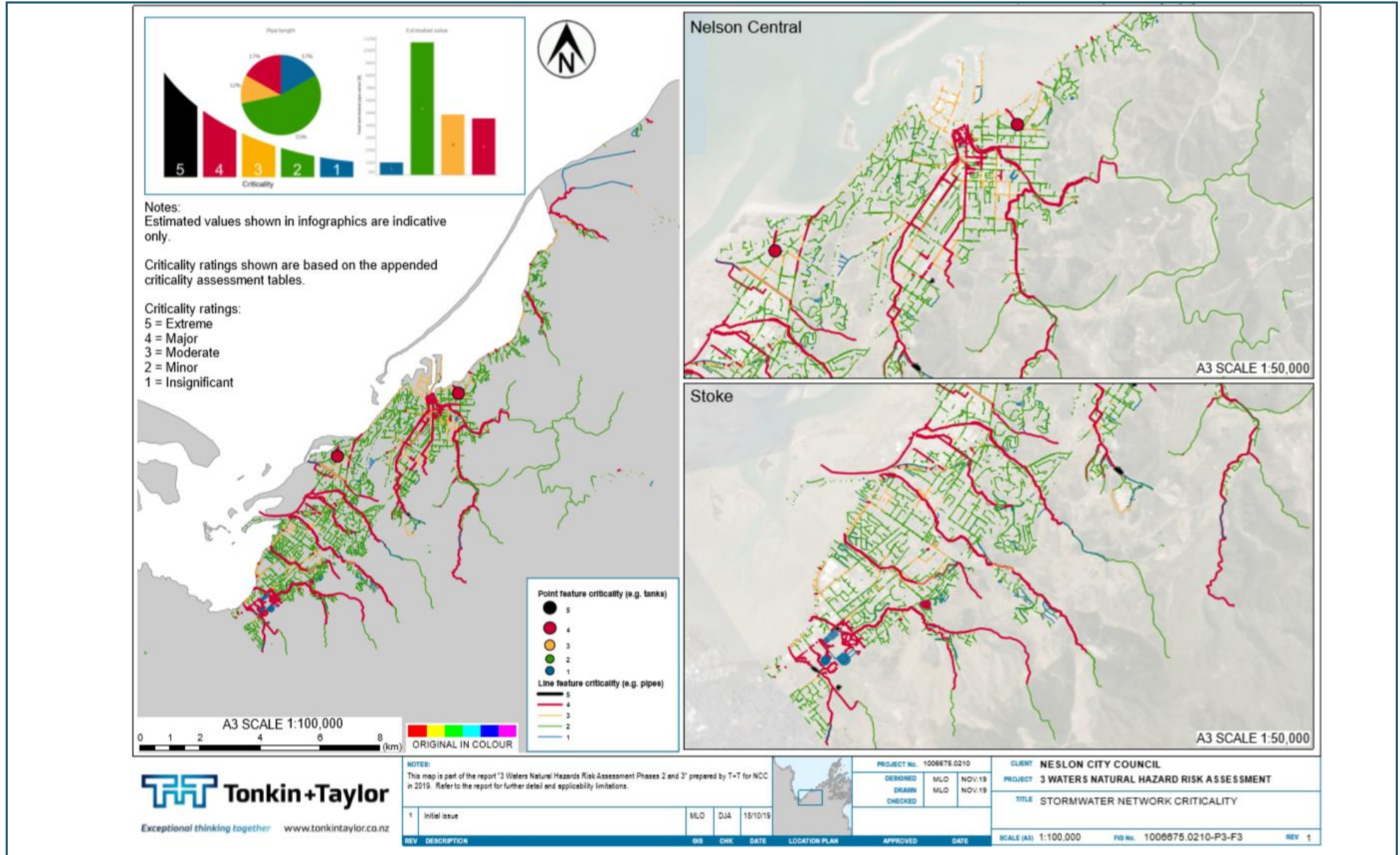
The range of impacts criteria included:

- Safety
- Health
- Asset Performance / Service Delivery
- Environmental / Historical / Cultural
- Financial
- Political / Community / Reputational
- Proximity of Asset to other Infrastructure
- Critical Facilities (Serviced by asset)

Assets that have been assessed as critical assets (Extreme or Major potential consequence of failure) within this activity are:

- The 2 stormwater pumping stations (The Wood and Centennial Road)
- Stormwater rising mains to stormwater pumping station outfalls
- Stormwater Detention Dams, including 1 classifiable large dam, in the York catchment
- Large pipes and box culverts (culverts under roads may be transport assets)
- Stormwater reticulation that services critical facilities
- All urban sections of streams within the stormwater network
- Manually operated flood gates

The following plan shows the results of work done to identify the criticality of the major Stormwater Assets.



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**NOTES:**  
 This map is part of the report '3 Waters Natural Hazards Risk Assessment Phases 2 and 3' prepared by T+T for NCC in 2019. Refer to the report for further detail and applicability limitations.

REV	DESCRIPTION	GIS	CHK	DATE
1	Initial issue	MLO	DJA	15/10/19

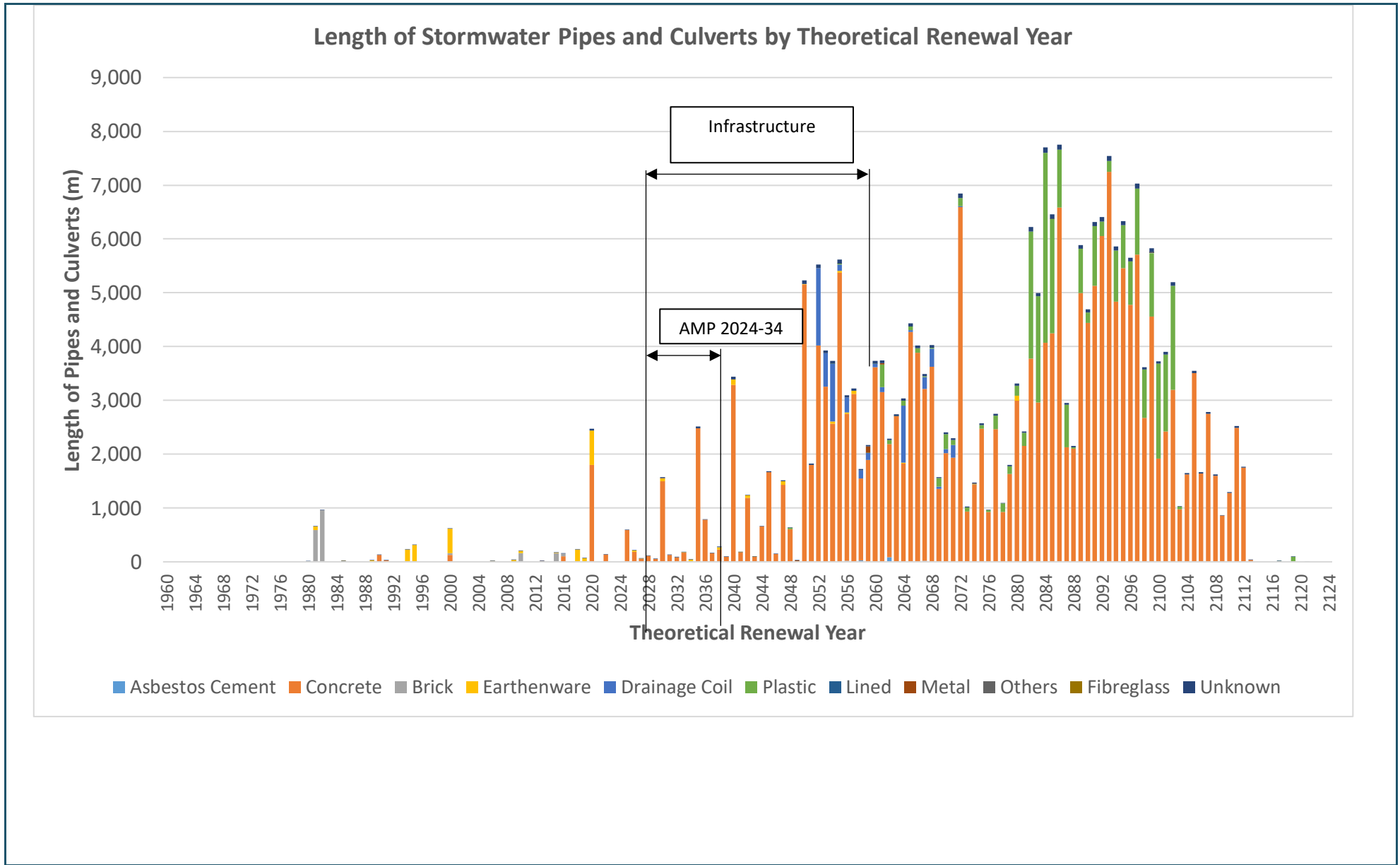
PROJECT NO.	1006675.0210
DESIGNED	MLO
CHECKED	MLO
DATE	NOV.19

CLIENT	NESLON CITY COUNCIL
PROJECT	3 WATERS NATURAL HAZARD RISK ASSESSMENT
TITLE	STORMWATER NETWORK CRITICALITY
SCALE (A3)	1:100,000
FIG NO.	1006675.0210-P3-F3
REV	1

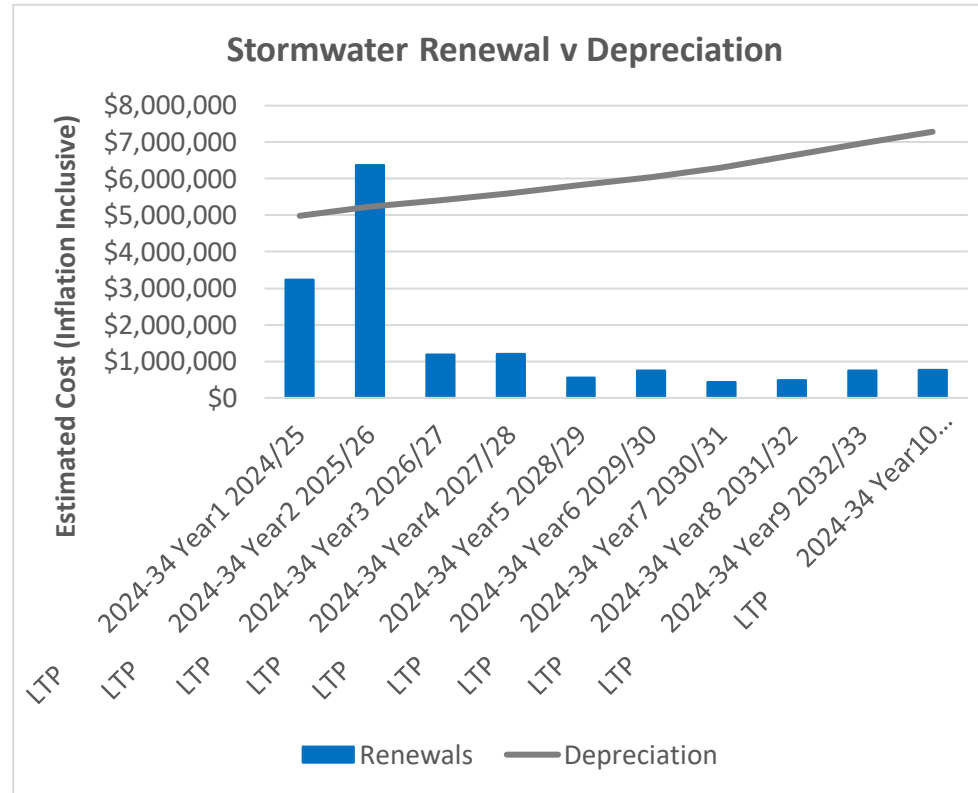
### **Stormwater Network Asset Renewal**

- Council's Stormwater AMP 2024-34 sets out the renewal decision making criteria for the Activity and theoretical service lives of the Assets. Council uses the theoretical asset lives in tandem with asset condition – as represented by failures and condition assessment, to guide renewal planning.
- The theoretical service lives are modelled in the following graphs of renewal years for the pipe network. The longer-term renewal programme and funding in the infrastructure strategy is largely based on the theoretical service life. The more immediate renewal programmes in the asset/activity management plans are developed by also taking into account increasing repair costs, loss of service impacts, efficiencies from joint renewal of assets in common locations and to respond to demands of growth.
- Council also monitors the performance of different asset materials - particularly to identify those that may not be meeting the theoretical service life for the asset type. These assets are then programmed for replacement as funding becomes available.
- Expenditure on asset renewals is programmed to increase over the 2024-34 term with Council also signalling that expenditure on renewals will increase in future asset/activity management plans to reach approximately 75% of capital expenditure.

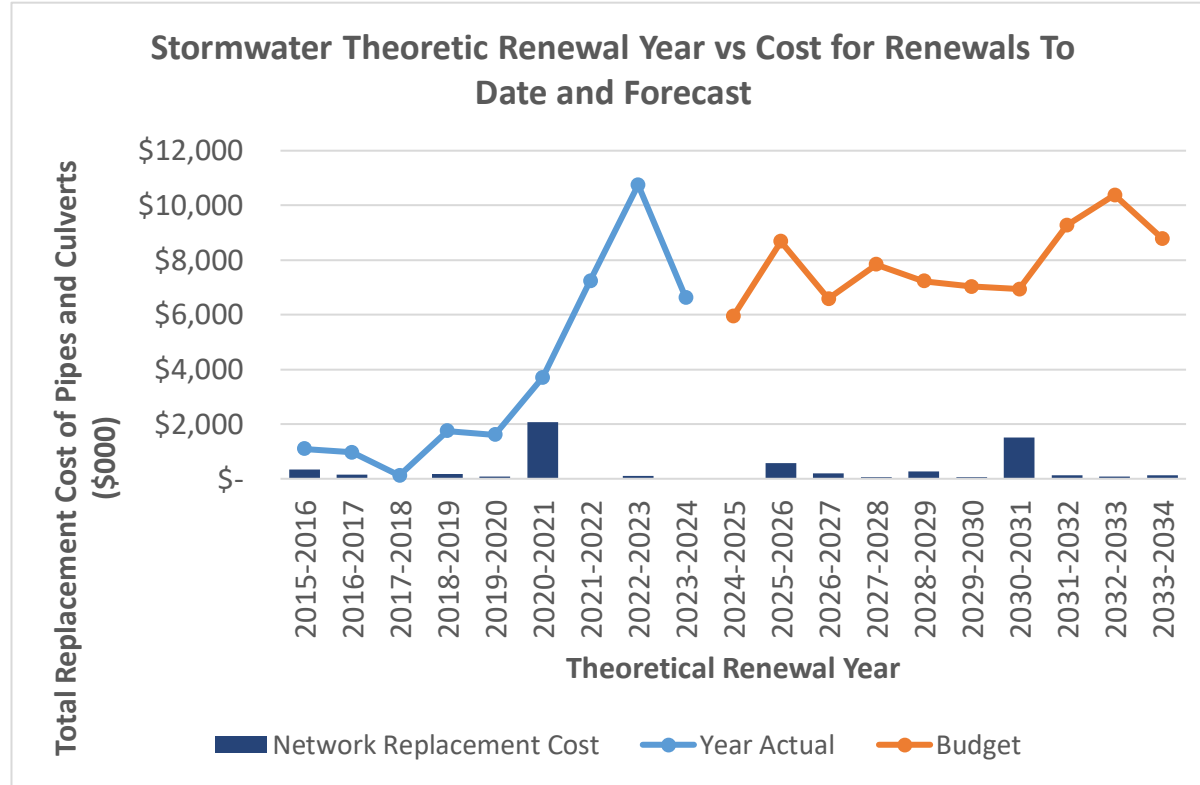
The following graphs and tables are taken from the AMP and show the expected renewal profile for the piped network and details of the expenditure and depreciation.



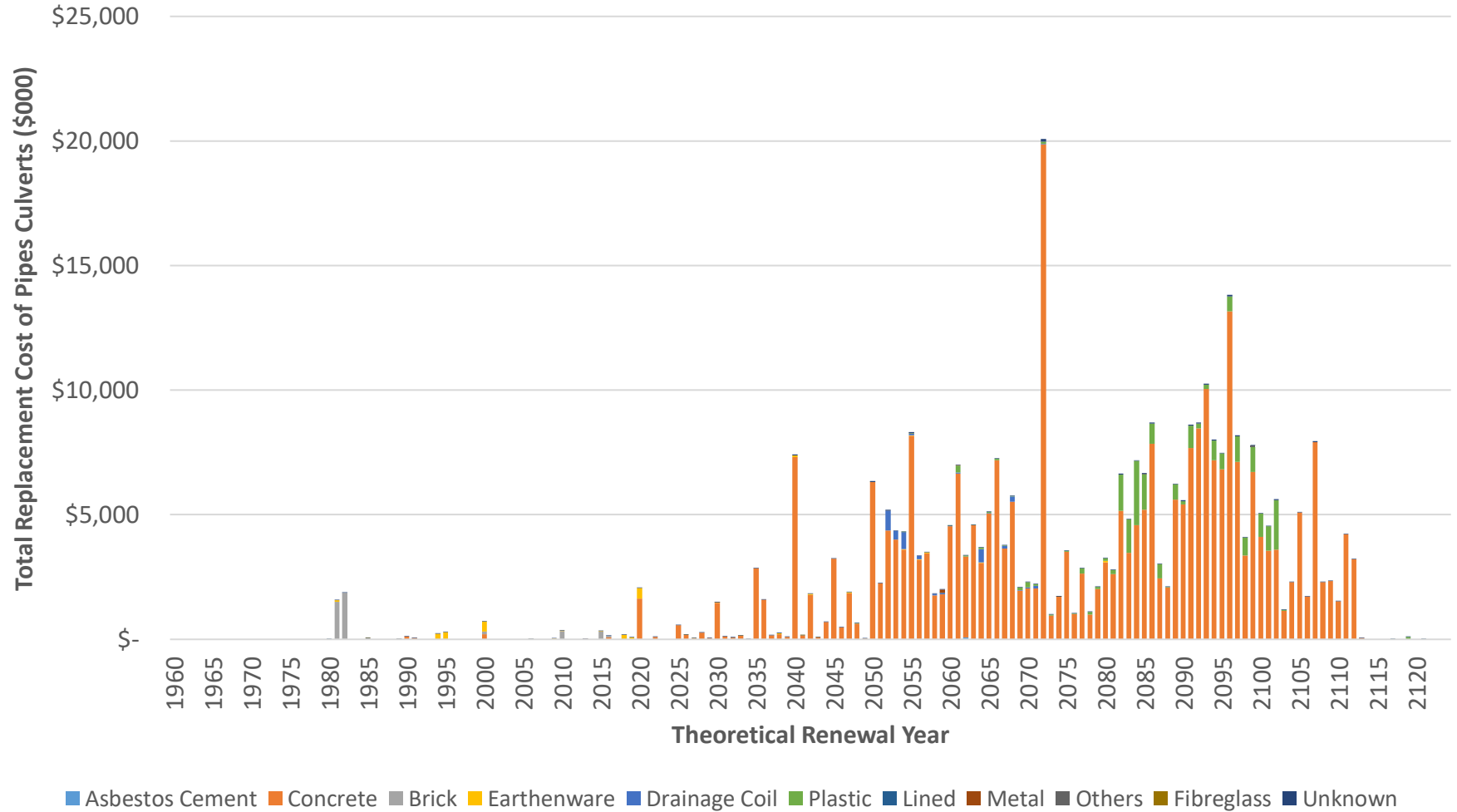
Historically, the estimated depreciation of stormwater assets, based on expected asset life, has exceeded the value of stormwater renewals. The reason for this is that where the renewal of a stormwater asset is required, it will generally be replaced by an asset with greater capacity which is considered as a level of service improvement, rather than a renewal. Therefore the 2 figures below need to be compared, as the second figure includes investment in both renewals and level of service improvements. The high renewal costs in years 1 and 2 in the figure below relate to the St Vincent Street stormwater box culvert renewal.



Since 2020, annual capital spend on stormwater projects which involve replacement or upgrade of existing pipes has significantly exceeded theoretical replacement cost based on the expected service life of assets. This should be considered in the context of the above figures, and the expected bow wave of renewals that will occur from 2050 onwards. It is also noted that many level of service upgrades involve extensions to the existing network as well as upsizing existing pipes.



### Total Replacement Cost of Stormwater Pipes and Culverts by Theoretical Renewal Year



**Expected Base Life of Stormwater Reticulation Assets**

<b>Material</b>	<b>Base Life (Years)</b>
Asbestos cement	80
Aluminium	60
Armour coil	60
Brick	80
Cast Iron	80
Concrete	90
Drainage coil	50
Earthenware	80
High Density Polyethylene	80
Perforated concrete	80
Plastic	80
Concrete lined steel	50

Typical useful lives from the New Zealand Infrastructure Asset Valuation and Depreciation Guidelines (from National Asset Management Support 2006 Edition) have been used as a guide in determining base lives. However the manual generally provides insufficient detail for our asset components and so Nelson City Council experience from the renewal of its assets has been used to vary these base lives.

**Renewal Strategies**

Strategy	Objective/ Description
<p>Identification of Renewal Needs</p>	<p>To avoid a concentration of asset renewals in a short window of time, when they all reach the end of their life, renewals are set by:</p> <ol style="list-style-type: none"> <li>1) Critical assets just before they fail.</li> <li>2) Others after three unexpected overflows (same locality) or multiple blockages in five years (same pipe/fitting material or location).</li> <li>3) When the level of service is no longer met owing to diminished capacity or excessive damage.</li> <li>4) Alignment with other utility renewals or upgrades</li> <li>5) Alignment with roading upgrades. Pipelines in poor condition will be programmed for replacement prior to or in conjunction with the road works.</li> <li>6) Alignment with other Council projects.</li> <li>7) Potential development in the city that requires an increase in network capacity.</li> </ol> <p>The identification of renewal needs may also be identified by location and or materials through condition reports, maintenance records (asset failure and expenditure history), natural hazard risk, wastewater infiltration studies, request for service (RFS) records, and observations of public, staff and contractors.</p>
<p>Project options</p>	<p>Decision Criteria (see Appendices E – Upgrades, and F - Renewals) are weighted. Then Business Options which consider benefits (aligned with the Decision Criteria), dis-benefits, cost, timescale and risks are compared to determine whether to proceed with a renewal or which renewal option to take.</p>
<p>Prioritisation of Renewal Projects</p>	<p>Decisions on renewal works consider the short and long-term effects on the operating and structural integrity of the system</p>
<p>Design</p>	<p>Renewal works constructed each year are generally designed in advance as with other Capital Projects.</p> <p>Renewal works are designed and undertaken in accordance with NTLDM 2020 standards for stormwater infrastructure. Low impact urban design is used where appropriate.</p> <p>Investment is made in new technologies to rehabilitate existing reticulation where appropriate, for example by re-lining a pipe, rather than excavate and replace.</p> <p>The design of open channels allows for flood flows, enhanced natural characteristics and the wider community recreational use of the area</p>
<p>Deferred Renewals</p>	<p>The quantity and impact of deferred renewals (if any) is tracked</p> <p>The Council recognises that although the deferral of some items will not impede the operation of many assets in the short term, repeated deferral will create a future Council liability.</p>

## Asset management approach

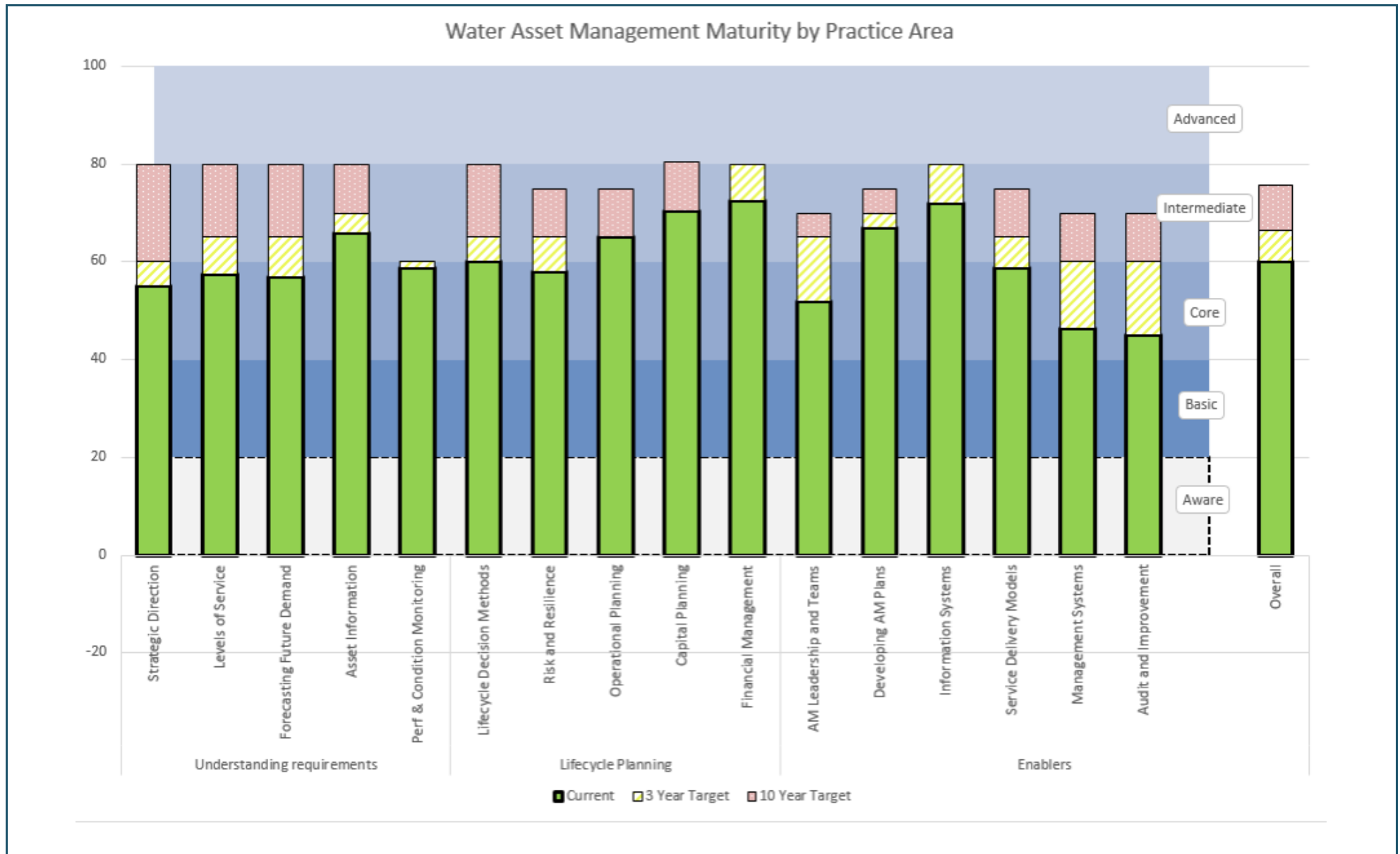
### Existing and proposed service delivery mechanisms;

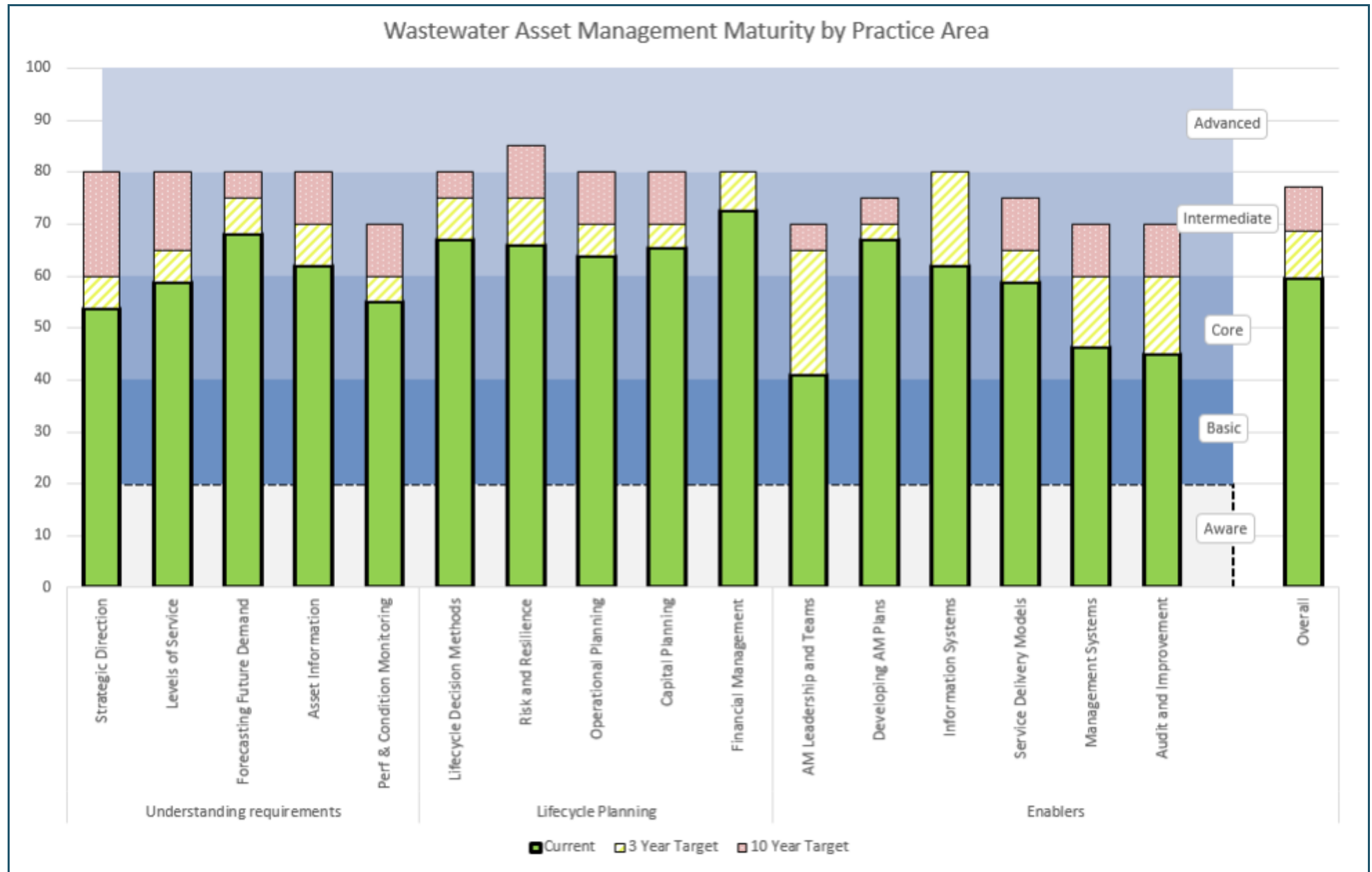
#### Service Delivery Teams:

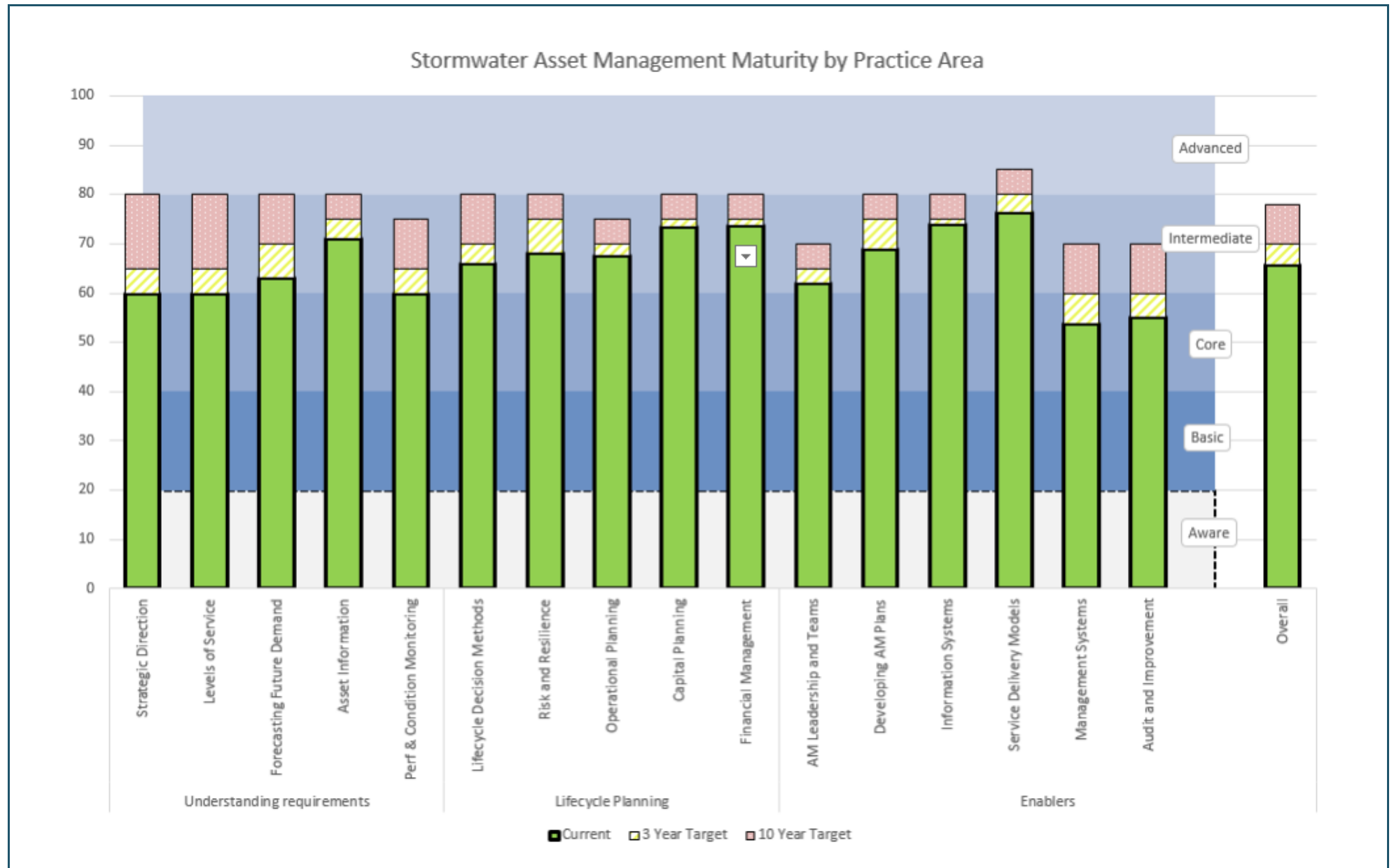
- Utilities Asset/Activity Management team - 4.6 FTE staff within the Infrastructure unit that are dedicated to the water services plus a separate Strategy and Policy Team that act to co-ordinate the cross Council Annual Plan, Long Term Plan and supporting documents such as the Activity/Asset Management Plans.
- Utilities Operations and Maintenance team - 7 FTE staff that manage external contractors for the water services.
- Capital projects team that manage procurement of design, consenting and construction services from external consultants and contractors.
- NRSBU team – Approx. 3FTE plus consultants and contractors. Governance is provided by the Joint Committee of the NCC and TDC.

### Supporting asset management policy or framework;

- Nelson City Council has adopted an Activity Management Policy. This is appended in Appendix B.
- The Asset/Activity Management Plans generally follow the IIMM layout.
- Council is proposing to standardise the format of the Asset/Activity Management Plans across Council. This will bring all plans into one document to share the background information that is common to all. Each separate Activity will have an Activity specific section that will cover all technical detail plus funding requirements. The proposal will help standardise the wide range of documents that Council create every three years and avoid un-necessary duplication of effort in the preparation of each document. Regulatory reporting to Taumata Arowai, the Commerce Commission and through Annual Plans/ Long Term Plans and Annual Reports will continue to comply with the relevant legislation. It is not expected that this initiative will lead to any water-specific accountability or regulatory reporting issues.
- Asset management maturity assessment. Council has undertaken an assessment of the current Asset management maturity. The results are shown below. Councils Policy requires Activity Management Plans to maintain a 'Core Plus' maturity level.







## Statement of regulatory compliance

### Stormwater:

- RM 075499 – V1 Discharge of stormwater to freshwater – expires 19 February 2044
- RM 175025-V1 Land use consent for disturbance of rivers, including culvert and bridge maintenance works, deposition of material, vegetation removal, and gravel extraction throughout the Nelson Region for the purpose of maintenance and repair works - expires on the date the relevant Regional Freshwater Rules in the Whakamahere Whakatū Nelson Plan become fully operative.
- RM 205095 To discharge hydroseed to land where it may enter water and sediment into water from works carried out under land use consent RM175025V1 and water permit RM175033 - expires on the date the relevant Regional Freshwater Rules in the Whakamahere Whakatū Nelson Plan become fully operative.
- RM 205133 The discharge of herbicides in or near waterbodies within the Nelson Region to control invasive aquatic pest plants – expires on 27 October 2035
- RM 175033 Water permit: to temporarily dam (with coffer dams) and divert rivers and install fish baffles and other fish passage enhancement structures throughout the Nelson Region - expires on the date the relevant Regional Freshwater Rules in the Whakamahere Whakatū Nelson Plan become fully operative.
- RM 155171 Water permit to temporarily divert water – expires 11 December 2050
- RM 985327 Stormwater discharge from Centennial Park – expires 24 August 2033
- RM 115033 Formalise the existing Wood stormwater outfall structure – expires 1 April 2046
- RM 015445 Stormwater discharge into Maitai River – expires 19 February 2037
- RM 155428 To disturb the bed of Little Go Stream and extract gravel – expires 20 January 2051
- RM 035215 Coastal permit for works in the CMA and land use consent for laying pipes through the Rocks Road car park – expires 3 December 2038

### Water Supply:

- RM 165239 Water Permit - Take, Use and Divert water – expires 31 May 2052
  - *For the consumptive water take of 254 litres per second from the Roding River for public water supply purposes;*
  - *To take up to five cubic metres water per day from the upper Long Gully Weir associated with the maintenance of the screens at the Roding Weir intake;*
  - *To dam water behind the Roding Weir;*
  - *For the diversion of water over the Roding Weir and through the weir's intake screens;*
  - *To dam water in the Roding River by means of a temporary bund for the purpose of trapping and settling sediment upstream of the Roding Weir;*
  - *To divert the flow of the Roding River through the upstream diversion tunnel; and*
  - *To divert water over the upper and lower Long Gully Weirs.*
- RM 165317 Land Use Consent – structures and disturbances - expires 31 May 2052
  - *To use, reconstruct and maintain the Roding Weir structure and the upper Long Gully Weir structure and to authorise the existing lower Long Gully weir;*

- *To disturb the bed for the purposes of flushing gravel through (via the sliding sluice gate) the Roding Weir;*
  - *To disturb the bed of the Roding River for the purpose of excavating and relocating gravel over the Roding Weir;*
  - *To disturb the bed of the Roding River for the purpose of excavating and relocating gravel through the diversion tunnel;*
  - *Operating the diversion tunnel by diverting water and gravel through the sluice gate; and*
  - *From time to time to construct, reconstruct, use, alter, extend or demolish a temporary gravel bund in the Roding River for the purpose of diverting sediment through the diversion tunnel.*
- RM 165318 Water Permit to discharge water containing sediment into the Roding River as a result of maintenance of the weir – expires 31 May 2052
  - RM 165122 Land use consent for the existing dam on the North Branch of the Maitai River; and Land use consent for the existing weir on the South Branch of the Maitai River – expires 11 March 2054
  - RM 165192 & V1 Water permit to dam the flow of the of the North Branch of the Maitai River; Water permit to divert the flow of the North Branch of the Maitai River over the dam spillways and to the South Branch via the backfeed; Water permit to dam the flow of the South Branch of the Maitai River; Water permit to divert the flow of the South Branch of the Maitai River over the weir; Water permit to take up to the full flow of the North Branch of the Maitai River; Water permit to take up to 300 litres per second of water from the South Branch of the Maitai River; Variation to parent consent to amend the parameters for dissolved oxygen saturation in the North Branch Reservoir and to require a monitoring and reporting programme for dissolved oxygen saturation – expires 11 March 2054
  - RM 165193 & V1 Discharge permit to discharge up to 400 litres per second of water from the North Branch Reservoir to the South Branch via the backfeed; Discharge permit to discharge scour water, mixing box overflow, and enhancement water to the historic North Branch channel below the dam whereafter it flows into the Maitai River at the Forks; Discharge permit to discharge overflow water from the North Branch Reservoir to the Maitai River via the spillways; and Discharge permit to discharge water, sediment and gravel from pipeline service valves and surge towers to water or to land where it may enter water. Change of conditions 9 and 10 of Resource Consent RM165193 to allow for discharge of water from the reservoir to the South Branch during summer periods when the reservoir is thermally stratified – expires 11 March 2054
  - RM045100 WTP chlorine discharge

### Wastewater

#### **Nelson scheme (WWN-00237):**

- RM 025169 Consent for Coastal Permit to discharge treated wastewater to Tasman Bay, Consent to use, maintain and renew a pipeline and outfall structure, and to occupy the seabed, Consent to deposit in or on the seabed substances from the outfall pipe, Consent to discharge wastewater onto or into land, namely the existing oxidation pond and proposed wetlands and flow buffer storage ponds, Consent to discharge contaminants, namely wastewater treatment plant gases, to air from a wastewater treatment plant – expires 1 December 2024
- RM 105388 V1 & RM 105388A V1 Accidental discharges from the network – expires 1 April 2032
- RM 155262 Consent to discharge to air non-odorous based components resulting from an odour treatment process associated with the Corder Park pump station. Atawhai Drive, Nelson – expires 25 August 2050
- RM 165359 Discharge permit to discharge contaminants to air from an industrial premises and from three 400 kilo-Watt stationary internal combustion engines in relation to the upgrade of the Neale Park Pump Station – expires 25 January 2052

- RM 045202-1-4 To allow the fisheries outfall pipeline and diffuser to exclusively occupy the coastal marine area – expires 19 December 2040
- RM 115212 & V1 Anchoring of the Fisheries Outfall Pipeline to the seabed and superseding condition 6 of RM045202 – expires 19 December 2040

**Nelson Regional Sewerage Scheme (WWN-00236)**

- RM050862 (NRSBU) Consent for Coastal permit - Pipeline in the Waimea Estuary btw Bell Island and Rabbit Island – expires 14 October 2040
- RM090563 (NRSBU/TDC) Consent for Coastal permit for the disturbance of the foreshore and bed of an estuary over a distance of more than 1,000 metres. (restricted coastal activity) – expires 16 September 2045
- RM090885 (NRSBU/TDC) Consent for Coastal permit to disturb and occupy the foreshore and seabed for the purposes of constructing the duplicate wastewater pipeline and return pipe – expires 16 September 2045
- RM090887 (NRSBU/TDC) Consent for Coastal permit to undertake maintenance and repair work on the joints and fittings of the existing estuary pipeline and to maintain the duplicate wastewater pipeline and return pipe – expires 16 September 2045
- RM095331 (NRSBU/NCC) Consent for Coastal permit for the construction of two pipelines (duplicate wastewater pipeline and return pipe) under the bed of the Waimea Inlet. (restricted coastal activity) – expires 16 September 2045
- RM095332 (NRSBU/NCC) Consent for Coastal permit for ongoing maintenance of the pipelines under the bed of the Waimea Inlet and to undertake maintenance works on the joints and fittings of the existing estuary pipeline – expires 16 September 2045
- RM095333 (NRSBU/NCC) Consent for Coastal permit for the deposition of material within the estuary – expires 16 September 2045
- RM095334 (NRSBU/NCC) Consent for Coastal permit for the disturbance of the foreshore and bed of an estuary over a distance of more than 1,000 metres. (restricted coastal activity) – expires 16 September 2045
- RM095335 (NRSBU/NCC) Land Use consent for earthworks on Saxton Island within the coastal environment overlay - expires 16 September 2045
- RM165114 (NRSBU) Discharge permits for the aberrational discharge of wastewater to the CMA – expires 16 February 2038
- RM165115 (NRSBU) Discharge Permits for the aberrational discharge of wastewater to land – expires 16 February 2038
- RM165116 (NRSBU) Discharge Permits for the aberrational discharge of wastewater to air – expires 16 February 2038
- RM171238 (NRSBU) Discharge treated wastewater into the Waimea Inlet – expires 21 February 2040
- RM171255 (NRSBU) Discharge contaminants (primarily odour) into air – expires 21 February 2040
- RM171256 (NRSBU) Discharge treated wastewater onto land via irrigation – expires 21 February 2040
- RM171257 (NRSBU) Discharge treated wastewater to land via seepage – expires 21 February 2040
- RM171258 (NRSBU) Use and maintenance of a pipe and diffuser outlet structure within the Waimea Inlet - expires 21 February 2040
- RM200062 (NRSBU) Earthworks associated with construction of a bund - expires 21 February 2040
- RM200063 (NRSBU) Earthworks associated with the construction of a bund within 200m of the CMA, discharge of sludge to land and air during dewatering and desludging of ponds - Discharging of sludge to land from dewatering and desludging of ponds - expires 21 February 2040
- RM200064 (NRSBU) Earthworks associated with the construction of a bund within 200m of the CMA, discharge of sludge to land and air during dewatering and desludging of ponds - Discharge to air, during desludging of ponds - expires 21 February 2040

- RM200638 (NRSBU) Discharge permit to discharge biosolids onto land – expires 16 March 2040
- RM200639 (NRSBU) Discharge permit to discharge contaminants into air from application of biosolids to land – expires 16 March 2040
- RM200640 (NRSBU) Land Use Consent to operate and maintain the Biosolids Application Facility (BAF), and associated activities for the application of biosolids to land - expires 16 March 2040
- RM200641 (NRSBU) Discharge permit to discharge washdown water and stormwater to land from the BAF - expires 16 March 2040
- RM211275 (NRSBU) Discharge of treated wastewater to land for irrigation purposes – expires 1 May 2043
- RM211278 (NRSBU) Land use consent to construct water tanks within the Coastal Environment Area – expires 1 May 2043
- RM220234 (NRSBU) Construction and maintenance of a pipeline for the reticulation of treated wastewater between the Wastewater Treatment Plant on Bell Island to the boundary of the Greenacres Golf Club on Best Island with minor earthworks in the transitional foreshore areas at the end of the causeway – expires 24 August 2057
- RM220940 (NRSBU) Land disturbance, coastal disturbance and vegetation clearance for the purpose of regional sewerage scheme wastewater pipeline duplication within the Coastal Marine Area - Bells Island to Saxon Road Pump Station – expires 24 August 2057
- RM230486 (NRSBU) Occupation and disturbance of the Coastal Marine Area associated with the installation of buried pipelines between Bell and Best Islands – expires 1 September 2057

**Expired consents that are currently being renewed under section 124 Resource Management Act 1991;**

Council has lodged applications for the new consents for the Nelson Wastewater Treatment Plant. The process has been placed on hold pending new Environmental Standards and discussions with iwi as to consent duration.

- RESOURCE CONSENT 235324 : Coastal permit to discharge treated wastewater to Tasman Bay from the Nelson Wastewater Treatment Plant. : Process Suspended 13/12/23,
- RESOURCE CONSENT 235326 : Discharge permit to discharge treated wastewater to land via seepage from the base of wastewater ponds and wetlands, including wastewater leachate from dewatering of sludge within the buffer pond following desludging activities. : Process Suspended 13/12/23
- RESOURCE CONSENT 235327 : Land use consent to remove vegetation and undertake earthworks to gain access to, and prepare the buffer pond for storage of sludge. : Process Suspended 13/12/23
- RESOURCE CONSENT 235328 : Discharge permit to discharge contaminants to air from the operation of a wastewater treatment plant, including during desludging activities (odour). : Process Suspended 13/12/23
- RESOURCE CONSENT 235329 : Coastal permit to place, use and maintain a pipeline and outfall diffuser structure, including replacement outfall diffuser structure, on and under the bed of Tasman Bay. : Process Suspended 13/12/23
- RESOURCE CONSENT 235331 : Coastal permit to disturb the foreshore and seabed to replace an existing outfall diffuser structure located on and under the bed of Tasman Bay. : Process Suspended 13/12/23
- RESOURCE CONSENT 235332 : Discharge permit to discharge contaminants to air from the operation of a diesel-powered electricity generator. : Process Suspended 13/12/23

- Consents will shortly be sought for the replacement wastewater pump station at Paru Paru Road and the renewal of the Atawhai Rising Main.
- There are no current enforcement actions against Council as a utility service provider.
- Council is awaiting the outcome of central government legislation. Council anticipates that the city will comply with any new requirements.
- Council currently complies and expects to maintain compliance into the future.

Council supports a range of compliance monitoring initiatives that also provide an alert when non-compliance might be identified:

- Council has dedicated asset management, operations and maintenance staff who monitor changes to central government legislation and the operation of the utility networks.
- Water Outlook software that captures water supply lab results and monitoring data from the water treatment plant which is used for compliance reporting to Taumata Arowai.
- Matt Malloy Consulting (Drinking Water Specialist and independent auditor) is contracted annually to complete a Drinking Water Assessment.
- Monitoring of Resource consent conditions and Taumata Arowai reporting requirements are undertaken by staff and contractors.

Parameters	Drinking supply schemes	Wastewater schemes	Stormwater Schemes/catchments
<p><b>Drinking water supply</b></p> <ul style="list-style-type: none"> <li>Bacterial compliance (E.coli)</li> <li>Protozoa compliance</li> <li>Chemical compliance</li> <li>Boiling water notices in place</li> <li>Fluoridation</li> <li>Average consumption of drinking water</li> <li>Water restrictions in place (last 3 years)</li> <li>Firefighting sufficient</li> </ul>	<p>Yes Yes Yes 1 notice in place over the last 3 years - for short period 31 May 2022 Yes 178L per person per day residential use. 275L per person per day combined residential and commercial use. Yes Yes</p>	<p>Scheme complies with resource consents.</p>	<p>Scheme complies with resource consents.</p>
<p><b>Resource Management</b></p> <ul style="list-style-type: none"> <li>Significant consents (note if consent is expired and operating on S124)</li> <li>Expire in the next 10 years</li> <li>Non-compliance: <ul style="list-style-type: none"> <li>Significant risk non-compliance</li> <li>Moderate risk non-compliance</li> <li>Low risk non-compliance</li> </ul> </li> </ul>	<p>Water supply take [number] See above table Water discharge [number] See above table</p> <p>No expired water supply consents</p> <p>No water supply consents to expire in the next 10 years</p> <p>0 0 0</p>	<p>Wastewater discharge water/land/air [number] See above table Network [number] See above table</p> <p>Expired wastewater consent RM 025169 (WWTP), operating on S124 – See above this table</p> <p>RM 105388 V1 &amp; RM105388 to expire in 2032 – See above this table</p> <p>0 0 RM171238 (NRSBU) re: maximum daily discharge (only under significant adverse weather conditions</p>	<p>Stormwater discharge [number] See above table Network [number] See above table</p> <p>No expired stormwater consents</p> <p>RM 985327 to expire 2033 – See above this table See above table – some consents to expire on the date the relevant Freshwater Rules in the Whakamahere Whakatū Nelson Plan become fully operative</p> <p>0 0 0</p>

<ul style="list-style-type: none"> <li>Active resource consent applications</li> </ul>	0	<p>The process for the 7 resource consent applications below has been placed on hold pending new Environmental Standards and discussions with iwi as to consent duration. These are in response to expired consent</p> <p>RM025169 operating on S124</p> <p>RM235324</p> <p>RM235326</p> <p>RM235327</p> <p>RM235328</p> <p>RM235329</p> <p>RM235331</p> <p>RM235332</p> <p>RM200641V1 (NRSBU) variation to continue discharge of stormwater to land</p>	0
<ul style="list-style-type: none"> <li>Compliance actions (last 24 months):</li> </ul>			
<ul style="list-style-type: none"> <li>Warning</li> </ul>	0	0	0
<ul style="list-style-type: none"> <li>Abatement notice</li> </ul>	0	0	0
<ul style="list-style-type: none"> <li>Infringement notice</li> </ul>	0	0	0
<ul style="list-style-type: none"> <li>Enforcement order</li> </ul>	0	0	0
<ul style="list-style-type: none"> <li>Convictions</li> </ul>	0	0	0

**Capital expenditure required to deliver water services and ensure that water services comply with regulatory 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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Drinking Water</b>										
Capital expenditure - to meet additional demand	3,156	4,404	5,612	4,910	3,830	2,659	2,425	3,961	3,632	5,331
Capital expenditure - to improve levels of services	4,304	3,291	4,489	6,612	6,039	4,515	4,249	4,335	3,615	3,643
Capital expenditure - to replace existing assets	1,300	1,833	1,047	1,437	4,720	3,447	3,488	9,846	12,481	6,489
<b>Total projected investment for drinking water</b>	<b>8,760</b>	<b>9,528</b>	<b>11,148</b>	<b>12,959</b>	<b>14,589</b>	<b>10,621</b>	<b>10,162</b>	<b>18,142</b>	<b>19,728</b>	<b>15,463</b>
<b>Wastewater</b>										
Capital expenditure - to meet additional demand	1,700	9,405	13,373	10,637	1,460	941	4,793	5,676	11,736	13,217
Capital expenditure - to improve levels of services	5,250	3,085	2,922	4,863	7,708	7,328	5,392	6,159	7,987	12,046
Capital expenditure - to replace existing assets	4,219	3,962	8,441	9,745	14,074	15,911	17,557	16,640	13,557	9,233
<b>Total projected investment for wastewater</b>	<b>11,169</b>	<b>16,452</b>	<b>24,736</b>	<b>25,245</b>	<b>23,242</b>	<b>24,180</b>	<b>27,742</b>	<b>28,475</b>	<b>33,280</b>	<b>34,496</b>
<b>Stormwater</b>										
Capital expenditure - to meet additional demand	1,804	1,299	2,650	2,069	329	222	226	2,246	3,440	2,957
Capital expenditure - to improve levels of services	3,696	2,034	3,581	6,018	7,546	8,458	8,924	10,710	9,328	8,085
Capital expenditure - to replace existing assets	3,480	6,826	1,301	1,297	603	814	475	505	803	828
<b>Total projected investment for stormwater</b>	<b>8,980</b>	<b>10,159</b>	<b>7,532</b>	<b>9,384</b>	<b>8,478</b>	<b>9,494</b>	<b>9,625</b>	<b>13,461</b>	<b>13,571</b>	<b>11,870</b>
<b>Total projected investment in water services</b>	<b>28,909</b>	<b>36,139</b>	<b>43,416</b>	<b>47,588</b>	<b>46,309</b>	<b>44,295</b>	<b>47,529</b>	<b>60,078</b>	<b>66,579</b>	<b>61,829</b>

Table provided by DIA

- Stormwater levels of service investment: Approximately \$2million of the \$68 million budgets is earmarked for fresh water quality improvements. The remaining \$66million will be directed to upgrading of existing networks to address issues that have been identified from storm events, flood modelling and the development of stormwater strategies for the city.
- Wastewater discharge consent: In the Nelson City Council Infrastructure Strategy 2024-54 Council has signalled \$154million for the upgrading of the Nelson Wastewater Treatment Plant. In the Long Term Plan 2024-34 Council has budgeted \$16.6 million for any shorter term upgrades. The exact nature of these works will be confirmed when more detail on processing and discharge standards becomes available.
- Capital delivery feasibility: Council LTP 2024-34 has a significant increase in proposed capital expenditure over the term of the Plan. The major drivers of this are:
  - An emphasis on increasing expenditure on renewals to smooth out the projected ‘bow wave’ of assets nearing the end of their service lives (see graphs above).
  - Expected increases in the cost of construction materials and contractor staff resources.
  - A number of larger construction projects that will likely attract contractors from outside the region or involve very expensive components but can be comfortably constructed by local construction resources eg the renewal of the Atawhai wastewater rising main \$57 m, Saxton Road Sewer renewal \$7m, the upgrading/replacement of the Nelson Wastewater Treatment Plant \$14m - are all likely to attract outside contractors, and the replacement of the potable water treatment plant membranes \$9m which has very expensive membranes but only requires minimal local construction resources.

Council is aware of the likely demand for construction resources and will be developing work programmes that – as far as possible, bring together multiple utility projects in the same street at the same time.

### Historical delivery against planned investment

Delivery against planned investment	Renewals investment for water services				Total investment in water services			
	FY2024/25	FY21/22 - FY23/24	FY18/19 - FY20/21	Total	FY2024/25	FY21/22 - FY23/24	FY18/19 - FY20/21	Total
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Total planned investment (set in the relevant LTP)	8,999	24,776	20,883	54,658	28,909	81,499	55,628	166,036
Total actual investment (except 24/25 = forecast)	8,797	27,931	21,551	58,279	26,890	89,432	46,086	162,408
<b>Delivery against planned investment (%)</b>	98%	113%	103%	107%	93%	110%	83%	98%

Table provided by DIA with some data input from NCC

- The table above shows that between July 2018 and June 2025 Council has managed to deliver 7% above planned level of renewals investment and is just 2% below planned total investment in water services.
- Covid and the economic impact of this has impacted capital works delivery. The rapid increase in construction costs has also acted to reduce the quantum of works completed within the LTP budgets. Central Government water reforms have reduced staff time available for capital project development.
- Budgets have been increased over the ten years of the LTP – particularly renewals.
- See Appendix C for detailed financial tables for the 2024-34 timeframe.

### **Additional guidance for Statement of Regulatory Compliance**

#### Additional information:

- Delaying wastewater consent replacements and waiting for new regulatory wastewater standards; Yes. Council has lodged consent applications for the Nelson Wastewater Treatment Plant and marine outfall prior to the time set out on section 124 RMA 1991. Processing of the applications is suspended pending some certainty around any new standards. As the consent application was submitted within 12 months of expiry, Council is still operating under a valid consent and continues to meet consent conditions.
- Any issues with water take/source consents or implementation of water safety plans and associated improvement works (for example, need new water source); No issues identified in the foreseeable future. The appropriate new consents have only recently been granted and will not expire until 2052 and 2054. Council does have the ability to access water in the TDC administered Waimea Plains aquifer should the city need an additional source.
- The investment plan includes fluoridation installation or associated upgrades, (under the Health Act 1956). Fluoridation plant has been installed and is now operational - in line with the Director General of Health Direction.

# Part C: Revenue and financing arrangements

## Revenue and charging arrangements

Revenue and charging arrangements
Charging and billing arrangements
<p><b><u>Water:</u></b></p> <ul style="list-style-type: none"> <li>• Council operates the city water supply as a single supply scheme. All connections are metered.</li> <li>• Costs are recovered through targeted rates plus water by meter charges – both set annually through the Annual Plan.</li> <li>• Separate Water invoices are sent to customers.</li> <li>• Minimum annual charge set to recover 30% of total cost of operating the water supply</li> <li>• User charges recover 70% of the estimated water revenue requirement through invoices for water by meter.</li> <li>• The charges for Bulk Water Users over 10,000m<sup>3</sup> per year and where there is predominantly summer irrigation, are charged at reduced rates for different use bands: 10,000-100,000m<sup>3</sup> and 100,000+m<sup>3</sup>. This recognises that these Users contribute to the summer peak, but do not use a large part of the reticulation.</li> </ul> <p><b><u>Wastewater:</u></b></p> <ul style="list-style-type: none"> <li>• For the purposes of funding Council operates the city wastewater network as a single catchment scheme.</li> <li>• Council funds the wastewater activity primarily from targeted rates and user charges:</li> <li>• Targeted rate to all rating units to which wastewater and sewage disposal service is provided; and</li> <li>• Volume based tradewaste charge to industrial and commercial businesses.</li> </ul> <p><b><u>Stormwater:</u></b></p> <ul style="list-style-type: none"> <li>• For the purposes of funding Council operates the city stormwater network as a single catchment scheme.</li> <li>• Council funds the stormwater activity primarily from targeted rates:</li> <li>• Targeted rate set as a uniform charge per rating unit but excluding rating units in the rural zone</li> <li>• Some separate rates are occasionally set to recover costs of natural disasters eg Nelson August 2022 storm event</li> </ul> <p><b><u>All Water Services:</u></b></p> <ul style="list-style-type: none"> <li>• How water services are proposed to be charged for each supply scheme/catchment; See above.</li> <li>• Any changes between current and future charging mechanisms; Council does not propose to change the current charging arrangements.</li> <li>• How the revenue from water services will be separated from the council’s other functions and activities. Council operates separate closed accounts for the water supply, wastewater and stormwater activities. See Appendix C.</li> </ul>
Water services revenue requirements and sources
<ul style="list-style-type: none"> <li>• <b>Revenue requirements under the Plan:</b> See Appendix C for revenue requirement details of each activity.</li> <li>• <b>Water Services Authority levy:</b> The Nelson City Council Annual Plan 2025-26 includes budget provision for the payment of Taumata Arowai Annual Levies of \$217,550 from 1 July 2025. Subsequent Annual Plans and Long Term Plans will make appropriate provision for both Taumata Arowai and Commerce Commission Levies.</li> <li>• <b>Sources of revenue:</b> See Appendix C for revenue details of each activity.</li> </ul>

**Development contributions:**

- Council collects Development Contributions (DC's) and reserve contributions from sub-dividers, developers and new industry for their share of capital expenditure for reserves and utility growth projects each year as part of the costs of growth:
  - Water Supply - \$4,300 per HUD excl GST
  - Wastewater - \$8,050 per HUD excl GST
  - Stormwater - \$7,630 per HUD excl GST

\*HUD - Household Unit of Demand has the same meaning as Residential Unit in the Nelson Resource Management Plan. The HUD is equivalent to one residential title containing one residential unit.

Council recognises that projects that are required to support growth fall into two categories:

- Those that are undertaken solely for the benefit of a growth project.
- Those that are predominantly growth related but have a measurable benefit to the wider community.

Council's Development Contributions Policy sets out the apportionment formula as follows:

- Projects that were/are completed solely to address the demands of, and the benefits to, development, are considered to be 100% growth.
- Projects that were/are solely to replace existing assets or change levels of service are considered to be 0% growth.
- Projects that benefit both the existing community and the future community are apportioned using the following formula:  $Growth \% = (Demand\ at\ capacity - Demand\ at\ Construction) / Demand\ at\ capacity$  .
- Where possible the demand has been quantified using first principles, e.g. traffic flow, litres used, impermeable surface area (ISA). In other cases the demand is quantified using the number of HUDs, and the increase over the capacity life of the asset.

For projects with mixed Growth/LOS components the wider community fund the proportion of the project cost that is not funded by DC's. Some limited funding has also been provided by central government through the Regional Infrastructure Fund.

- Stormwater charge (targeted rate) \$385.79 incl GST for 2024/25 assessed on all rating units except rural rating units, Saxton's Island, Council's stormwater network
- Wastewater residential, multi residential, rural, forestry and smallholding properties charge (targeted rate) \$640.09 incl GST for 2024/25
- Wastewater commercial charge per separately used or inhabited part of a rating unit (targeted rate) \$160.02 incl GST for 2024/25

Commercial tradewaste charge is calculated based on flow rates and effluent strength for the previous three years. There are three methods: A, B, and C

- Method A applies to the largest trade waste contributors and the charge is calculated on both discharge rates and effluent strength. Charges are highest for the most concentrated and larger volumes.
- Method B is new and applies to the next largest trade waste contributors, of which there are approximately 20 in Nelson city. The charge is calculated based on the estimated volume of effluent discharged and the measured effluent strength.
- Method C (previously known as Trade Waste B) applies to all other trade waste contributors, of which there are approximately 1400. The charge is calculated on the estimated volume of effluent discharged.

**Trade waste policy:**

Council's wastewater charges are established under the Council Bylaw 229: Wastewater including Trade Waste and Domestic Wastewater 2021 and set in each Annual Plan. The LTP 2024-34 sets out the wastewater charging background and details of the various methods that apply. The current charges can be found in Appendix A. Revenue from Tradewaste charges is expected to be in the order of \$3.6million for the 2024/25 financial year. Refer Appendix C.

Water fixed annual charge on all rating units where a water meter is installed for the property \$251.66 incl GST per connection for 2024/25

Water residential, commercial and industrial volumetric rate incl GST for 2024/25:

- Usage up to 10,000m<sup>3</sup> per year \$2.626 per m3
- Usage from 10,001 to 100,000m<sup>3</sup> per year \$2.232 per m3
- Usage over 100,000m<sup>3</sup> per year \$1.838 per m3
- Summer irrigation usage over 10,000m<sup>3</sup> per year \$2.442 per m3

**Subsidies and grants for capital expenditure:** IAF for one off, Development and financial contributions. Refer to Appendix C

**Existing and projected commercial and industrial users' charges**

Activity	Targeted Rates under Local Government (Rating) Act 2002	Fees and Charges set under the Local Government Act 2002	Central Government
<p>Water Supply Residential and non-residential properties connected to the network are charged common annual supply charges plus charges/m3. Volumetric bands apply with water charges/m3 reducing with increasing volume used.</p>	<p>Annual Supply Charge Water supplied through meters</p>		<p>NEMA disaster contributions. External income such as from Infrastructural Acceleration Fund (IAF). Fluoridation capital works payment.</p>
<p>Wastewater All properties connected to the network are charged a wastewater rate. Non-residential activities pay tradewaste charges under one of three different methods.</p>	<p>Drainage rates</p>	<p>Trade Waste Charges NRSBU investment return</p>	<p>NEMA disaster contributions. External income such as from Infrastructural Acceleration Fund (IAF).</p>
<p>Stormwater Most properties pay a stormwater rate. The exceptions are rural properties, Saxton Island and Council properties that are part of the stormwater network.</p>	<p>Drainage rates</p>		<p>NEMA disaster contributions External income such as from Infrastructural Acceleration Fund (IAF).</p>

**Projected charges for residential households on average over the 10-year period.**

See table in Part D below: Average projected charges for water services over FY2024/25 to FY2033/34

**The affordability of projected water services charges for communities**

- **Affordability considerations and constraints, including the community's ability to pay projected water services charges:** See table in Part D below: Average projected charges for water services over FY2024/25 to FY2033/34
- **Average water charges per connection as a percentage of median household income:** See table in Part D below: Average projected charges for water services over FY2024/25 to FY2033/34

## Funding and financing arrangements

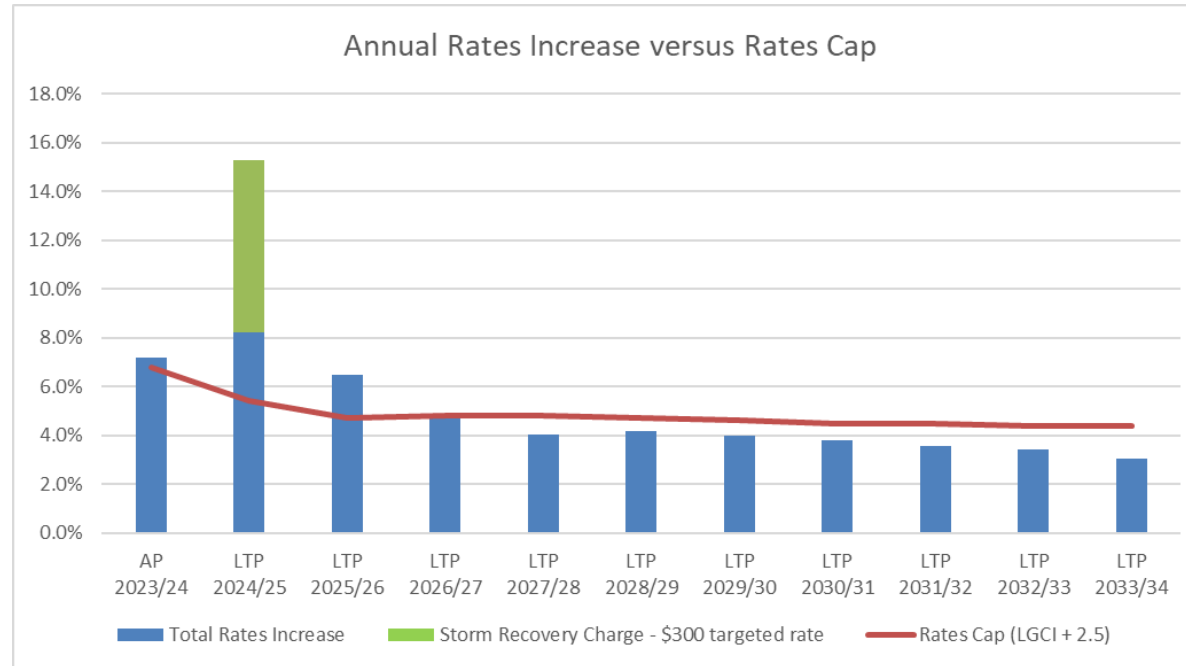
### Funding and financing arrangements

#### Water services financing requirements and sources

- Projected borrowing requirements over the 10-year period to deliver the level of investment required; Council plans to invest \$483 million in water services assets in the 10 years of the LTP 2024/34, in order to deliver this level of investment, Council projects a borrowing requirement of \$143 million net new debt in the water services activities which would increase the borrowing level from \$98 million at June 2024 to \$240 million by June 2034.
- Council is opting to operate the water services activities in house so there is not a specific requirement for working capital or cash for the water service activities. At a Council level, cash is managed according to our treasury management policy. From time to time, Council has daily cash flow surpluses and borrowing requirements, due to the mismatch of daily receipts and payments. All cash inflows and expenses pass through bank accounts controlled by the Finance Department. Council maintains a daily cash position report, and a yearly cashflow projection is prepared during the annual planning process. These reports determine Council's borrowing requirements and surpluses for investment for the year. Detail is captured within the Treasury Procedures Manual.
- Council, in line with the LGFA, has a borrowing limit that states that net debt to revenue must not exceed 280%. Council up till now has not specifically defined a ring-fenced borrowing limit for the water service activities however, since Council approved the LTP 24/34 which had a maximum net debt to revenue ratio of 300% for the combined water activities in the 10 year period, we have used that as the limit for the time being. Council will need to consider a ring-fenced debt to revenue ratio for the water services as part of our financial strategy in the process of setting our LTP 2027/37.
- Council's projected borrowings in the LTP 2024/34 are well within borrowing limits at the whole of Council level, with the net debt to revenue ratio not going above 185% across the 10 years and with debt headroom of \$270 million at June 2034. The water services activities reach their debt limit at June 2034 of the LTP 2024/34 and as mentioned above, this is due to the fact that the limit was not specifically set but rather implied. Until such time as the water services activities have a ring-fenced debt limit approved by Council, they will continue to have the all of Council debt headroom available as required.
- **Financial strategy**, Council does not have a financial strategy for the water services that is different from the whole of Council strategy for financing investment and operating expenditure, our Council will consider separately defining that in the LTP 2027/37 process. Our financial strategy as well as our revenue and financing policy is outlined in our LTP 2024/34 which demonstrates how Council will do the following:
  - Ensure that the level of rates and borrowing are financially sustainable and are kept within pre-set limits.
  - Fund delivery of the work programme, including network infrastructure, and deliver the levels of service in the Long Term Plan. Over the 10 years of the LTP 2024/34, we will support our community's wellbeing through transforming our city centre, fostering a healthy environment and climate resilience, and continuing recovery from the August 2022 severe weather event. We are also budgeting to make sure we have enough infrastructure in place so that houses can be built for the extra 5,000 people we expect to be living in Nelson in 10 years' time, bringing the population up to about 60,400.
  - **Operating expenditure in the water services activities are funded from the following possible sources:**
    - We levy fees and charges and targeted rates as a proxy to reflect the benefit received
    - We will claim for government grants or subsidies where we are providing services that are part of national programmes or where the government provides subsidies to us to provide certain services. We will also seek grants from other agencies when appropriate
    - Other sources of funding include interest and dividends received and other operating revenue such as rent received.
  - Council has seen very large infrastructure valuation increases during the years June 2019 to June 2024. It was decided that it was not affordable for current ratepayers to fully fund the increased depreciation on the revaluations in one step, as it would add a further 9.3% onto rates in the 2024/25 year. Therefore, Council chose to phase in

the depreciation funding over the 10 years of the LTP. Council plans to fully fund depreciation by 2034. This ensures that current users of infrastructure pay their fair share of the costs of wear and tear on our assets. Our debt will still be well controlled, serviceable through our income streams and will keep interest payments manageable.

- To fund Council’s operating expenditure, our annual rates revenue rises cap will remain at Local Government Cost Index (LGCI) plus 2.5% and an allowance for growth. This limit is at a whole of Council level and all planned operational expenditure in the water services activities is factored in when aiming to remain within the cap. This graph shows the planned rates increases for the whole of Council. (The rates limit will be breached in Year 1 and Year 2 due to the ongoing impact of inflation and the need to repay the August 2022 severe weather event as noted in our LTP 2024/34.)



- This table below shows the planned targeted rates increases for the combined water services which are embedded in the whole of Council increases in the graph above:

Projected Water Services Rates revenue	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
General and targeted rates	36,363	38,927	42,579	45,150	49,447	51,467	55,610	58,429	63,745	65,296
<b>Projected increase</b>	11.2%	7.1%	9.4%	6.0%	9.5%	4.1%	8.0%	5.1%	9.1%	2.4%

- **Capital expenditure is funded in the following priority order:** • Financial Contributions and Development Contributions (if a growth project) • Grants and subsidies • Cash surpluses after meeting the costs of renewals expenditure, which arise from Council’s funding of depreciation • Loans.

- To fund Council’s capital expenditure, our self-imposed debt cap for the whole of Council is set at a 200% debt to revenue ratio however our external debt cap as set by LGFA is a 280% debt to revenue ratio for the whole of Council. The net debt level for the whole of Council at 30 June 2025 is projected to be \$252.3 million and to be \$504.3 million by 30 June 2034. The water services borrowings requirements are embedded in the whole of Council requirements and the whole of Council requirements do not go about 185% of revenue in the LTP 2024/34. Consequently, the projected net debt to operating revenue calculation is within the council-determined limit for water services.
- Because the level of borrowing is planned to increase, the management of interest costs is very important. Council’s Treasury Management Policy includes the Investment and Liability Management Policies. These are published separately and are available on Council’s website. Council has determined maximum amounts and limits of debt. The borrowing limits table shows a comparison of the limits in the Treasury Management Policy compared with those set in the LTP 2024/34 for the whole of Council. The policy limits were determined in association with Council’s bankers and Treasury Advisor and the Local Government Funding Agency (LGFA). The table also shows that we are operating within the guidelines contained in the Treasury Management Policy. Nelson City Council is a Guaranteeing Local Authority in the Local Government Funding Agency (LGFA). Access to the LGFA means we can achieve lower borrowing costs for our community, and therefore funding. We must ensure that our net interest to rates revenue ratio is below 30% and Net Debt to Total revenue is less than 280% in order to retain the ability to borrow through LGFA.

Whole of Council borrowing limits table	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Net Debt	252,328	259,393	287,927	319,913	385,117	418,045	442,126	469,368	491,208	504,292
Net external debt not to exceed 200% of total revenue	130%	136%	135%	148%	179%	182%	181%	185%	185%	182%
Net interest expense on external debt as a % of total revenue to be less than 15%	5.8%	6.0%	5.9%	6.6%	7.7%	8.7%	9.0%	9.1%	9.2%	9.2%
Net interest expense on external debt as a % of total rates income to be less than 20%	10.2%	9.7%	10.1%	11.0%	12.0%	13.6%	14.1%	14.1%	14.1%	14.2%

Combined Water services 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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Net debt attributed to water services (gross debt less cash)	105,263	116,590	128,014	141,606	157,706	166,537	176,010	198,300	221,529	240,134
Operating revenue – combined water services	44,499	47,804	52,024	55,380	60,360	62,764	67,845	71,649	77,587	80,012
<b>Net debt to operating revenue %</b>	<b>237%</b>	<b>244%</b>	<b>246%</b>	<b>256%</b>	<b>261%</b>	<b>265%</b>	<b>259%</b>	<b>277%</b>	<b>286%</b>	<b>300%</b>

- The Expected tenor of new borrowings and how interest rate and refinance risk will be managed is determined by Council’s treasury management policy. The Council’s policy for interest rate risk management is to take a conservative, risk-averse approach by requiring a certain percentage of the Council’s borrowing to be fixed rate or hedged borrowing. Both the long term nature of the Council’s assets and the need for intergenerational equity mean it is important that the Council should have predictable interest costs and avoid increases in annual rates caused by interest rate rises.

<b>Debt Interest Rate Policy Parameters (calculated on rolling monthly basis)</b>		
<b>Debt Period Ending</b>	<b>Minimum Fixed Rate</b>	<b>Maximum Fixed Rate</b>
Current	40%	90%
Year 1	40%	90%
Year 2	35%	85%
Year 3	30%	80%
Year 4	25%	75%
Year 5	20%	70%
Year 6	0%	65%
Year 7	0%	60%
Year 8	0%	50%
Year 9	0%	50%
Year 10	0%	50%
Year 11	0%	25%
Year 12	0%	25%
Year 13	0%	25%
Year 14	0%	25%
Year 15	0%	25%

The Council’s policy for liquidity and funding risk management is:

- Ensure that the Council’s committed debt facilities and term loans mature over a wide time period;
- External debt plus unutilised committed debt facilities, plus liquid assets must be maintained at an amount of greater than 110% over existing external debt;
- The diversification of borrowing sources is achieved by the LGFA through the various funding markets accessed in its ongoing borrowing programme. Council diversifies its committed liquidity sources through both bank facilities and the LGFA. Matching expenditure closely to its revenue streams and managing cash flow timing differences;
- Maintaining its financial investments in cash/cash equivalent investments;
- Council has the ability to pre-fund up to 18 months of the forecast debt requirements including re-financings. Re-financings that have been pre-funded, will remain included within the funding maturity profile until their maturity date.

The Council’s rules for managing liquidity and funding risk are that the maturity profile of the total committed funding in respect to all external term debt and committed debt facilities is to be controlled by the following system:

<b>Period</b>	<b>Minimum %</b>	<b>Maximum %</b>
1 to 3 years	15	60
3 to 7 years	25	85
7 years plus	0	60

To minimise concentration risk the LGFA requires that no more than the greater of NZD 100 million or 33% of a Council’s borrowings from the LGFA will mature in any 12-month period.

- Council’s Debt repayment strategy is defined in our treasury management policy. The Council repays borrowings from rates, debt raising, surplus funds, proceeds from the sale of investments and fixed assets. Debt will be repaid as it falls due in accordance with the applicable borrowing arrangement. Subject to the appropriate approval and debt limits (per Council delegations register), a loan may be rolled over or re-negotiated as and when appropriate.

#### **Internal borrowing arrangements**

- Council records its external borrowing transactions in its Corporate activity, debt requirement is determined across all activities and loans raised and repaid as required in the Corporate activity. The closed (ring-fenced) water services activities have journals processed on a monthly basis to increase or decrease the internal loans from the Corporate activity based on funding requirements. Once Internal loan balances have been updated monthly we then also do Journals to apply the appropriate Finance charges to the water service activities based on the latest internal loan balance and the prevailing Interest rate that Council holds on its external borrowings.
- Council proposes to continue making use of the Internal borrowing arrangements up to and beyond 30 June 2028.
- We will continue with our status quo management process which accurately ensures that all water service transactions occur in their own activity and that the balancing funding required is dealt with through the internal loan mechanism.

#### **Determination of debt attributed to water services**

- The debt allocated to water services on the 30th of June 2024 is readily available in our accounting system since Council runs the water services as closed activities. What this means is that all revenue, expenditure, investment and internal borrowings are ringfenced in their separate water activity so that the internal borrowing requirement is a balancing figure for the activity each year.
- The total value of water service borrowings on the 30<sup>th</sup> of June 2024 was \$97.6 million. The net debt at 30<sup>th</sup> of June 2024 for the water services is the same as the borrowings since there are no specific cash or financial assets attributable to the water services.

#### **Insurance arrangements**

- We confirm that the asset owning organisation in the proposed service delivery arrangement (Nelson City Council and Nelson Regional Sewerage Business Unit) hold the necessary insurance policies.
- Annual insurance declarations are made and catastrophe modelling is performed every 5 to 7 years. Policy (sub)limits were reviewed in calendar year 2024 following a benchmarking exercise.
- Risk evaluation and assessment (aka catastrophe modelling) identifies probability of loss and cost under earthquake scenarios. Risks are modelled by insurance contract (hence distinguishing between above and below ground assets).
- Above ground catastrophe modelling was performed in calendar year 2024, below ground catastrophe modelling was performed in 2015. Individual site assessments, typically performed for instructure planning purposes, are not considered for insurance purchase decisions. Assessing adequacy of limits is not straight-forwards as:
  - above ground insurance policy limit of \$800M (equivalent to 20% of insured value) is shared with Tasman District Council and Marlborough District Council, and includes cover on non-water service assets such as head office, event centres, heritage facilities, and commercial rental properties – water assets account for ~30% of the insured assets for this policy. The 2024 modelling suggested that 1 in 1,000 year portfolio damage ratio is 7% versus 3% for Nelson City Council and Nelson Regional Sewerage Business Unit water services assets.

- below ground insurance policy limit of \$500M is shared with seven other councils (as part of the South Island Council Collective). Water assets, across all participating councils, account for more than 95% of the insured assets for this policy. A \$400M sublimit (equivalent to 20% of insured value) applies to Nelson City Council and Nelson Regional Sewerage Business Unit. The 2015 modelling suggested a 1 in 500 year 'mean' damage ratio of 19% for Nelson City Council and Nelson Regional Sewerage Business Unit water services assets. Whilst not strictly comparable, by way of benchmarking it is noted:

-- CHCH EQ percent of wastewater network damaged was 21% (see report The-Value-of-SCIRT)

-- Aon's 2023 DIA report suggested a 1 in 1,000 year damage ratio of 30% to 50% for the water services of Nelson, Tasman, and Marlborough (Significant localised earthquake / Alpine Fault rupture).

-- LAPP planned policy limit divided by [Marlborough District Council water services replacement value](#) plus 10% inflationary allowance is ~30% i.e.  $\$400M \div (\$1,240M \times 110\%)$

-- We are aware of that the range of reasonable is very wide e.g. different vendors estimates can vary relatively from the 'average of vendors' by +/-30%

- Network assets (below ground) are insured for catastrophe events including Earthquake, Natural Landslip, Flood, Tsunami, Tornado, Windstorm, Volcanic Eruption, Hydrothermal
- & Geothermal activity, and Subterranean Fire. Notable shared sub-limit include: Additional Increased Cost of Working - \$10M (shared), Enablement Costs - \$21.6M (shared).
- The basis of valuation for network assets is the (optimised) replacement value at policy commencement (primarily using unit x unit price approach) plus 3.5 years inflationary allowance (to allow for average delay to loss and rebuild under a catastrophic event).
- Point assets (above ground) are comprehensively insured, with the exception of some pump station which may be insured for earthquake only or not insured, depending on value. Notable sub-limits include: Fire - \$100M, Additional Increased Cost of Working - \$20M (shared), Landslip/subsidence - 5M (shared).
- The basis of valuation for point assets is the (optimised) replacement value at policy commencement (individually values) plus 2 years inflationary allowance (to allow for average delay to loss and rebuild).
- Neither network nor point assets include an allowance for demolition however a shared (across participating insured councils) additional expenses (business interruption) cover is purchased for network and point assets.

Summary of the insurance management policy for water services, includes:

- Insurance procedure ('Insure Council Assets') describes our declaration process noting asset identification follows the financial identification/valuation process. The procedure sets a 1 in 500 year loss target limit purchase for below ground and a 1 in 1,000 year target for above ground.
- Key (insurable) risks are described in a quarterly organisational risk report to the Audit, Risk & Finance committee which includes identified mitigations. A description of risk appetite/tolerance is provided at an individual risk level through the organisational risk register however strategic/organisational risk tolerance is not formally defined but instead feedback is sought through the Audit, Risk & Finance committee.
- Council's disaster policy response does not address insurance. Mitigate of insurance losses is addressed through recovery plans post event. Use of insurance to mitigate losses is reference in the organisational risk register.
- A brief summary of the annual insurance renewal is reported to Audit, Risk & Finance committee. Progress reporting on water services insurance claim settlement is reported to the relevant recovery taskforce (stood up after major events). The instruction to place insurance is made by the Group Manager Corporate Services. Agreement to settle water services insurance claims is made either by the Group Manager Corporate Services or the Group Manager Infrastructure.

## 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

Council’s assessment is that we are already achieving financially sustainable delivery of water services. This is detailed in the section below which confirms that we are achieving:

- ‘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

Council’s assessment is that we are already achieving financially sustainable delivery of water services. In order to maintain and improve this status up to and beyond the 30th of June 2028, we propose the following:

- Council will continue to plan its cost of operating services and investment requirements through the ongoing activity management plans for the water services in conjunction with the infrastructure strategy which looks at a 30-year horizon. Periodic condition assessment of assets and renewal planning with a view of the full life of the assets will continue to inform both the activity management plans and the infrastructure strategy which then in turn set the required operating costs and investment levels in our long-term plans that cater for required maintenance, regulatory standards and growth. In achieving the necessary levels of service and investment, Council is planning through the LTP 2024/34, to invest \$483 million on the water services assets with the spend ramping up over the ten years from \$29 million in 2024/25 to \$62 million in 2033/34.
- In order to deliver this level of investment, Council projects a borrowing requirement of \$143 million net new debt in the water services activities which would increase the borrowing level from \$98 million at June 2024 to \$240 million by June 2034.
- Council, in line with the LGFA, has a borrowing limit that states that net debt to revenue must not exceed 280%. Council up till now has not specifically defined a ring-fenced borrowing limit for the water service activities however, since Council approved the LTP 24/34 which had a maximum net debt to revenue ratio of 300% for the combined water activities in the 10 year period, we have used that as the limit for the time being. Council will need to consider a ring-fenced debt to revenue ratio for the water services as part of our financial strategy in the process of setting our LTP 2027/37.
- Council’s projected borrowings in the LTP 2024/34 are well within borrowing limits at the whole of Council level, with the net debt to revenue ratio not going above 185% across the 10 years and with debt headroom of \$270 million at June 2034. The water services activities reach their debt limit of 300% at June 2034 of the LTP 2024/34 and as mentioned above, this is due to the fact that the limit was not specifically set but rather implied. Until such time as the water services activities have a ring-fenced debt limit approved by Council, they will continue to have the “all of Council” debt headroom available as required.
- Council plans to raise sufficient revenue year on year to cover all operating costs which includes finance costs and depreciation. Council has seen very large infrastructure valuation increases during the years June 2019 to June 2024. It was decided that it was not affordable for current ratepayers to fully fund the increased depreciation on the revaluations in one step, as it would add a further 9.3% onto rates in the 2024/25 year. Therefore, Council chose to phase in the depreciation funding over the 10 years of the LTP. Council plans to fully fund depreciation by 2034.

- Our annual rates revenue rises cap will remain at Local Government Cost Index (LGCI) plus 2.5% and an allowance for growth. This limit is at a whole of Council level and all planned operational expenditure in the water services activities is factored in when aiming to remain within the cap. The planned revenue requirement in the LTP 2024/34 results in an increase in the annual residential water services charges from \$1,328 in the 2024/25 year to \$2,112 in the 2033/34 year at an average annual increase of 5.3%.

#### **Risks and constraints to achieving financially sustainable delivery of water services**

Council's assessment is that we are already achieving financially sustainable delivery of water services. Council recognises that the following risks and constraints will need to be monitored and addressed if they develop to the level that may impact ongoing financial sustainability.

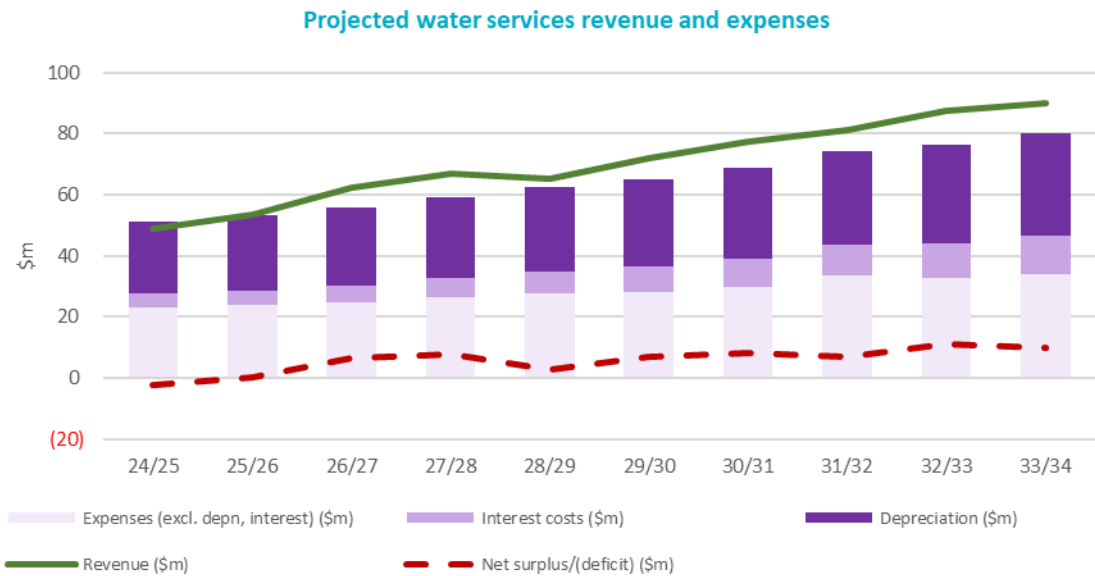
- **Asset Valuations and Construction Costs:** Increasing construction costs and future annual revaluations of our water services assets that act to produce increases in value that are considerably higher than the Local Government cost Index.
- **Natural hazards:** Extreme weather events and natural hazards such as earthquakes can significantly impact day to day work programmes and require large capital inputs with urgency.
- **New materials and technology:** Adoption of new materials and technology into the network will need to be managed to ensure that acceptable service lives will be met and any unanticipated issues with technology will not result in unsustainable costs.

## Financially sustainable assessment - revenue sufficiency

### Assessment of revenue sufficiency

#### Projected water services revenues cover the projected costs of delivering water services

- Our LTP 2024-34 Projects revenues that are sufficient to cover the costs (including servicing debt) of water services delivery;
- Projected revenues are sufficient to finance the required level of investment; and
- We therefore assess that projected revenues meet the 'revenue sufficiency' test.



Graph provided by DIA with some data input from NCC

**Average projected charges for water services over FY2024/25 to FY2033/34**

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	612	643	686	704	751	770	802	825	886	892
Wastewater	425	446	492	530	590	605	670	700	764	778
Stormwater	292	315	337	350	369	383	400	416	439	442
<b>Average charge per connection / rating unit</b>	<b>1,328</b>	<b>1,404</b>	<b>1,515</b>	<b>1,584</b>	<b>1,710</b>	<b>1,758</b>	<b>1,872</b>	<b>1,941</b>	<b>2,089</b>	<b>2,112</b>
Increase in average charge	10.0%	5.7%	7.9%	4.6%	8.0%	2.8%	6.5%	3.7%	7.6%	1.1%
<b>Water services charges as % of median household income</b>	<b>1.5%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.7%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.8%</b>	<b>1.9%</b>	<b>1.9%</b>	<b>1.9%</b>

CPI has been applied to calculate the median household income projection (2.5% annual change March 2025 year according to StatsNZ) <https://www.stats.govt.nz/information-releases/consumers-price-index-march-2025-quarter/> applied to the Nelson Median Household income for year ended 2024 according to StatsNZ: <https://www.stats.govt.nz/information-releases/household-income-and-housing-cost-statistics-year-ended-june-2024/>

Table provided by DIA with some data input from NCC

**Projected operating surpluses/(deficits) for water services**

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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Operating surplus/(deficit) excluding capital revenues – combined water services	(6,675)	(5,475)	(3,751)	(3,905)	(2,238)	(2,363)	(1,056)	(2,748)	1,389	(161)
Operating revenue – combined water services	43,233	46,479	50,521	53,638	58,375	60,519	65,306	68,868	74,621	76,637
<b>Operating surplus ratio</b>	<b>(15.4%)</b>	<b>(11.8%)</b>	<b>(7.4%)</b>	<b>(7.3%)</b>	<b>(3.8%)</b>	<b>(3.9%)</b>	<b>(1.6%)</b>	<b>(4.0%)</b>	<b>1.9%</b>	<b>(0.2%)</b>

Table provided by DIA

- The projected operating revenues for water services in the LTP 2024-34 plan to generate deficits for all years except the 2032/33 year.
- All planned operating deficits are a direct result of a Council decision to not fully fund depreciation until after the 2033/34 year.
- Council raises cash through rates and charges to pay for current operating expenses which include depreciation. The cash raised for depreciation is used to purchase replacement assets or repay loans within that activity. In the LTP 2024/34 it was noted that Council has seen very large infrastructure valuation increases during the years June 2019 to June 2024. It was decided that it was not affordable for current ratepayers to fully fund the increased depreciation on the revaluations in one step, as it would add a further 9.3% onto rates in the 2024/25 year. Therefore, Council chose to phase in the depreciation funding over the 10 years of the LTP. Council plans to fully fund depreciation by 2034.
- Any operating surpluses that are achieved will be used to firstly repay the debt incurred for prior year operating deficits and thereafter would go into a reserve which would reduce the revenue requirement for future years.

**Projected operating cash surpluses for water services**

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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Operating surplus/(deficit) + depreciation + interest costs - capital revenues	21,609	24,010	27,129	28,894	32,685	34,626	37,863	38,166	44,768	45,870
Operating revenue – combined water services	44,499	47,804	52,024	55,380	60,360	62,764	67,845	71,649	77,587	80,012
<b>Operating cash ratio</b>	<b>48.6%</b>	<b>50.2%</b>	<b>52.1%</b>	<b>52.2%</b>	<b>54.1%</b>	<b>55.2%</b>	<b>55.8%</b>	<b>53.3%</b>	<b>57.7%</b>	<b>57.3%</b>

Table provided by DIA

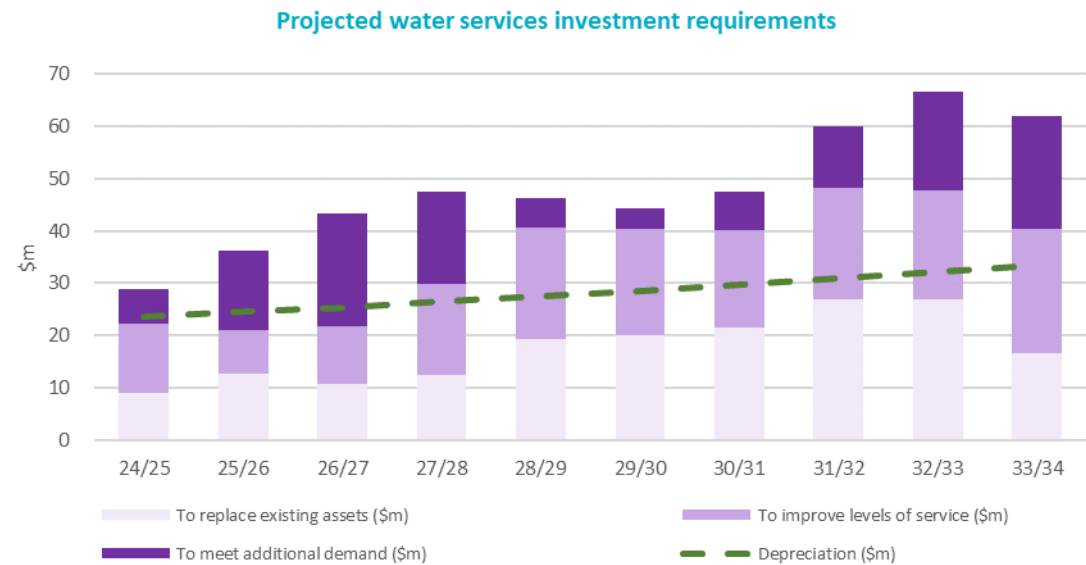
- As seen in the table above, our LTP 2024-34 plans to generate sufficient operating cashflows to pay interest, fund planned investment in renewals and repay debt as it comes due which is the priority of how cash surpluses will be applied.

## Financially sustainable assessment - investment sufficiency

### Assessment of investment sufficiency

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

- 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.



Graph provided by DIA with some data input from NCC

**Renewals requirements for water services**

Asset sustainability ratio	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Capital expenditure on renewals – all water services assets	8,999	12,621	10,789	12,479	19,397	20,172	21,520	26,991	26,841	16,550
Depreciation – all water services assets	23,592	24,610	25,381	26,438	27,611	28,627	29,738	30,975	32,218	33,445
<b>Asset sustainability ratio</b>	<b>(61.9%)</b>	<b>(48.7%)</b>	<b>(57.5%)</b>	<b>(52.8%)</b>	<b>(29.7%)</b>	<b>(29.5%)</b>	<b>(27.6%)</b>	<b>(12.9%)</b>	<b>(16.7%)</b>	<b>(50.5%)</b>

Table provided by DIA

- The renewals investment in water services as displayed in the table above has been determined in our LTP 2024-34. The investment and timing of the spend that goes into our long term plan is determined in our infrastructure strategy and Council activity management plans which Council staff populate as part of managing the life of the asset.
- Projected levels of renewals investment are lower than projected depreciation in the ten years of our LTP 2024-34 and this is because we are dealing with assets that often have useful lives of 80 years or more which means that while depreciation is occurring on an annual basis, renewals only come due at the end of the useful life subject to condition assessment. Council has already started preliminary work on the activity management plans for the 2027-37 10 year plan and one of the goals at this point is to prioritise the spend on renewals as a minimum of 75% of the capital program.

**Total water services investment required over 10 years**

Asset investment ratio	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Total capital expenditure – all water services assets	28,909	36,139	43,416	47,588	46,309	44,295	47,529	60,078	66,579	61,829
Depreciation – all water services assets	23,592	24,610	25,381	26,438	27,611	28,627	29,738	30,975	32,218	33,445
<b>Asset investment ratio</b>	<b>22.5%</b>	<b>46.8%</b>	<b>71.1%</b>	<b>80.0%</b>	<b>67.7%</b>	<b>54.7%</b>	<b>59.8%</b>	<b>94.0%</b>	<b>106.7%</b>	<b>84.9%</b>

Table provided by DIA

- **How the proposed levels of investment have been determined:** Through the development of the utilities asset/activity management plans and the infrastructure strategy. Operational expenditure is based on costs associated with maintenance contracts, any work programmes that cannot be capitalised and the day to day costs of running utilities operations and asset/activity management teams. Capital expenditure costs are split into renewals, growth and level of service upgrades. Work programmes are identified by both the Council operations teams through the maintenance contracts and the asset/activity management team through planning for renewals, responding to growth projects from development proposals, repairs and maintenance post natural hazard events and readiness/resilience projects.
- **How this is consistent with the long-term infrastructure strategy, asset management plan and/or other strategic documents relating to water services asset management:** Council’s asset/activity management team prepare asset/activity management plans with proposed work programmes and budgets that match the ten year forecast for each Council Long Term Plan. An Infrastructure Strategy is also developed that more broadly looks at infrastructure needs for a thirty year horizon. The work programmes and budgets for these documents are developed by the same team to ensure consistency.

**Average remaining useful life of network assets**

Asset consumption ratio	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Book value of water infrastructure assets	983,171	1,014,692	1,055,513	1,099,569	1,141,148	1,179,517	1,220,906	1,273,617	1,332,827	1,385,785
Replacement value of water infrastructure assets	1,736,743	1,807,965	1,891,757	1,980,189	2,067,518	2,152,744	2,243,147	2,346,440	2,458,654	2,565,670
<b>Asset consumption ratio</b>	56.6%	56.1%	55.8%	55.5%	55.2%	54.8%	54.4%	54.3%	54.2%	54.0%

Table provided by DIA with some data input from NCC

- There is a small 2.6% percentage decrease in this ratio forecast over the LTP 2024/34. However, the Nelson City Council Infrastructure strategy plans for \$432 million of investment across the water services in years 2034-2044 which should push the ratio back up again.

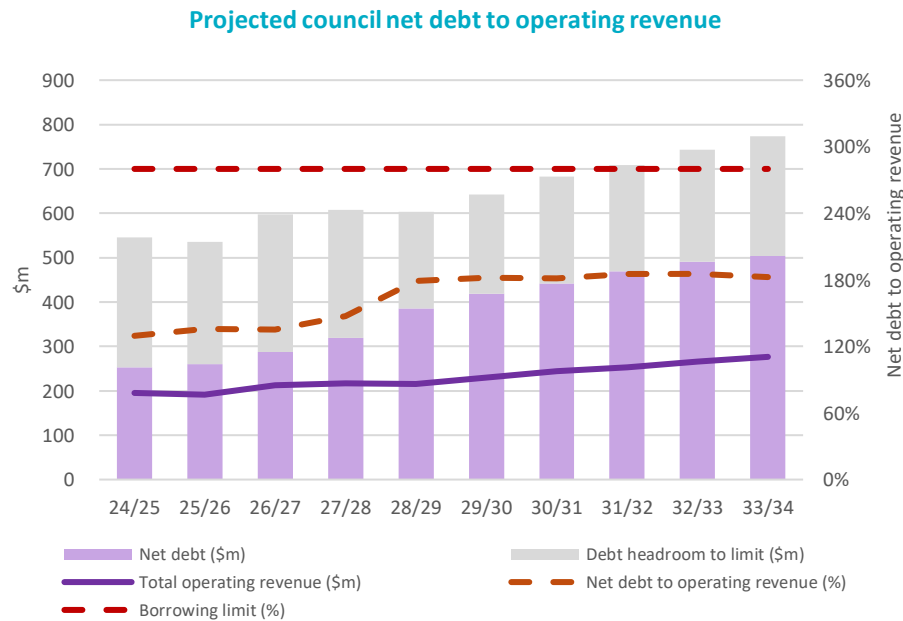
## Financially sustainable assessment - financing sufficiency

### Assessment of financing sufficiency

#### Confirmation that sufficient funding and financing can be secured to deliver water services

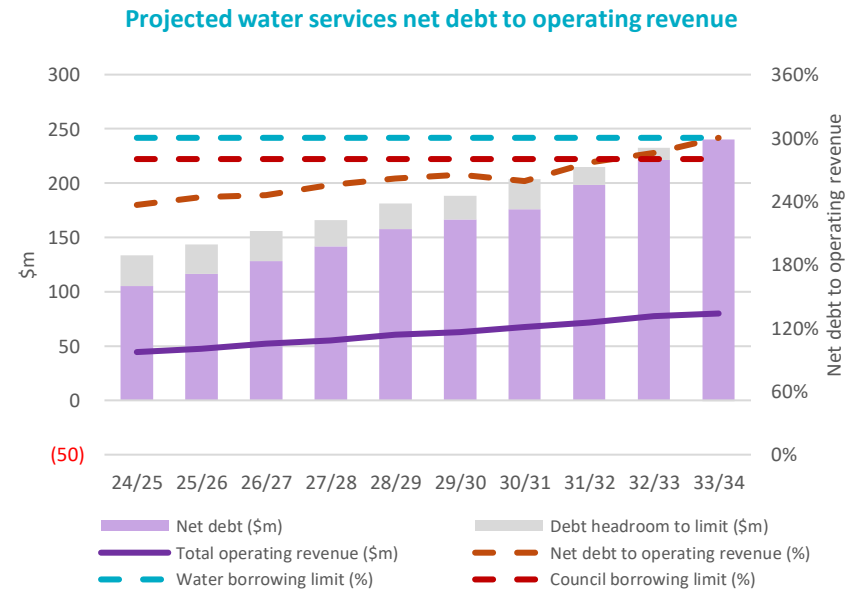
- Projected total council borrowings are within council borrowing limits;
- Projected water services borrowings are within the council-determined limit for water services borrowing;
- The required levels of borrowings can be sourced; and
- The Plan meets the 'financing sufficiency' test.

#### Projected council borrowings against borrowing limits



Graph provided by DIA with some data input from NCC

#### Projected water services borrowings against borrowing limits



Graph provided by DIA with some data input from NCC

**Projected borrowings for water services**

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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Net debt attributed to water services (gross debt less cash)	105,263	116,590	128,014	141,606	157,706	166,537	176,010	198,300	221,529	240,134
Operating revenue – combined water services	44,499	47,804	52,024	55,380	60,360	62,764	67,845	71,649	77,587	80,012
<b>Net debt to operating revenue %</b>	<b>237%</b>	<b>244%</b>	<b>246%</b>	<b>256%</b>	<b>261%</b>	<b>265%</b>	<b>259%</b>	<b>277%</b>	<b>286%</b>	<b>300%</b>

Table provided by DIA with some data input from NCC

- There is a requirement for increased borrowings for water services across the ten years of the LTP 2024/34 which directly correlates to the increasing investment in water services assets. Council’s current borrowing limit as imposed by LGFA is that net debt should not exceed 280% of revenue. The water services borrowings requirements are embedded in the whole of Council requirements and the whole of Council requirements do not go about 185% of revenue in the LTP 2024/34. Consequently, the projected net debt to operating revenue calculation is within the council-determined limit for water services.

**Borrowing headroom/(shortfall) for water services**

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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Operating revenue	44,499	47,804	52,024	55,380	60,360	62,764	67,845	71,649	77,587	80,012
Debt to revenue limit for water services (%)	300%	300%	300%	300%	300%	300%	300%	300%	300%	300%
<b>Maximum allowable net debt at borrowing limit</b>	<b>133,549</b>	<b>143,469</b>	<b>156,135</b>	<b>166,206</b>	<b>181,154</b>	<b>188,368</b>	<b>203,616</b>	<b>215,033</b>	<b>232,855</b>	<b>240,134</b>
Projected net debt attributed to water services	105,263	116,590	128,014	141,606	157,706	166,537	176,010	198,300	221,529	240,134
<b>Borrowing headroom/(shortfall) against limit</b>	<b>28,286</b>	<b>26,879</b>	<b>28,121</b>	<b>24,600</b>	<b>23,448</b>	<b>21,831</b>	<b>27,606</b>	<b>16,733</b>	<b>11,326</b>	<b>0</b>

Table provided by DIA with some data input from NCC

- Council has not specifically defined a debt limit for water services on a net debt to operating revenue basis, it has however approved the LTP 2024/34 that has an embedded maximum debt to revenue ratio of 300% for the water services which is why we have set that as the Council limit for water services for the time being. Other Council activities have less debt requirements which is why at a whole of Council level we are still well below the borrowing limit of 280% of revenue.
- The projected borrowing headroom reduces from \$28,000,000 as at June 2025 to nil as at June 2034. It should be noted that the whole of Council still has projected headroom of \$270,000,000 as at June 2034 meaning that if the water services had a greater requirement, that could be very easily accommodated.
- Council will need to consider a ring-fenced debt to revenue ratio for the water services as part of our financial strategy in the process of setting our LTP 2027/37.

**Free funds from operations**

Free funds from operations	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Projected net debt attributed to water services	105,263	116,590	128,014	141,606	157,706	166,537	176,010	198,300	221,529	240,134
Projected free funds from operations – water services	16,917	19,135	21,630	22,533	25,373	26,264	28,682	28,227	33,607	33,284
<b>Free funds from operations to net debt ratio</b>	16.1%	16.4%	16.9%	15.9%	16.1%	15.8%	16.3%	14.2%	15.2%	13.9%

Table provided by DIA with some data input from NCC

- Council has not been using the Free funds from operations to net debt ratio as a financial measurement in our financial strategy so Council would need to consider adding this as part of our financial strategy measurements in the process of the LTP 2027/37.
- It is worth noting though that the 2033/34 year in the table above has the lowest ratio in our ten-year plan at 13.9% which is still well above the 9% that LGFA would be requiring from an entity with the number of water connections that we have.

## Part E: Projected financial statements for water services

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

#### Projected funding impact statement

Projected funding impact statement – drinking water	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Sources of operating funding</b>										
General rates	0	0	0	0	0	0	0	0	0	0
Targeted rates	16,192	17,250	18,648	19,377	20,936	21,749	22,955	23,909	26,026	26,521
Subsidies and grants for operating purposes	0	0	0	0	0	0	0	0	0	0
Local authorities fuel tax, fines, infringement fees and other	0	0	0	0	0	0	0	0	0	0
Fees and charges	57	58	60	61	62	63	65	66	67	59
<b>Total sources of operating funding</b>	<b>16,249</b>	<b>17,308</b>	<b>18,708</b>	<b>19,438</b>	<b>20,998</b>	<b>21,812</b>	<b>23,020</b>	<b>23,975</b>	<b>26,093</b>	<b>26,580</b>
<b>Applications of operating funding</b>										
Payments to staff and suppliers	8,903	9,259	9,719	9,982	10,377	10,593	10,900	11,184	11,983	12,309
Finance costs	1,541	1,552	1,657	1,868	2,116	2,382	2,434	2,457	2,772	3,054
Internal charges and overheads applied	41	42	44	44	45	46	47	48	49	49
Other operating funding applications	0	0	0	0	0	0	0	0	0	0
<b>Total applications of operating funding</b>	<b>10,485</b>	<b>10,853</b>	<b>11,420</b>	<b>11,894</b>	<b>12,538</b>	<b>13,021</b>	<b>13,381</b>	<b>13,689</b>	<b>14,804</b>	<b>15,412</b>
<b>Surplus/(deficit) of operating funding</b>	<b>5,764</b>	<b>6,455</b>	<b>7,288</b>	<b>7,544</b>	<b>8,460</b>	<b>8,791</b>	<b>9,639</b>	<b>10,286</b>	<b>11,289</b>	<b>11,168</b>
<b>Source of capital funding</b>										
Subsidies and grants for capital expenditure	879	169	0	678	0	0	0	0	0	0
Development and financial contributions	617	978	999	1,020	1,040	1,985	2,024	2,067	2,108	2,153
Increase/(decrease) in debt	1,499	1,925	2,861	3,718	5,089	(155)	(1,502)	5,789	6,330	2,143
Gross proceeds from sales of assets	0	0	0	0	0	0	0	0	0	0
Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
<b>Total sources of capital funding</b>	<b>2,995</b>	<b>3,072</b>	<b>3,860</b>	<b>5,416</b>	<b>6,129</b>	<b>1,830</b>	<b>522</b>	<b>7,856</b>	<b>8,438</b>	<b>4,296</b>
<b>Applications of capital funding</b>										
Capital expenditure - to meet additional demand	3,156	4,404	5,612	4,910	3,830	2,659	2,425	3,961	3,632	5,331
Capital expenditure - to improve levels of services	4,304	3,291	4,489	6,612	6,039	4,515	4,249	4,335	3,615	3,643
Capital expenditure - to replace existing assets	1,300	1,833	1,047	1,437	4,720	3,447	3,488	9,846	12,481	6,489
Increase/(decrease) in reserves	0	0	0	0	0	0	0	0	0	0
Increase/(decrease) in investments	0	0	0	0	0	0	0	0	0	0
<b>Total applications of capital funding</b>	<b>8,760</b>	<b>9,528</b>	<b>11,148</b>	<b>12,959</b>	<b>14,589</b>	<b>10,621</b>	<b>10,162</b>	<b>18,142</b>	<b>19,728</b>	<b>15,463</b>
<b>Surplus/(deficit) of capital funding</b>	<b>(5,765)</b>	<b>(6,456)</b>	<b>(7,288)</b>	<b>(7,543)</b>	<b>(8,460)</b>	<b>(8,791)</b>	<b>(9,640)</b>	<b>(10,286)</b>	<b>(11,290)</b>	<b>(11,167)</b>
<b>Funding balance</b>	<b>(1)</b>	<b>(1)</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>(1)</b>	<b>0</b>	<b>(1)</b>	<b>1</b>

Projected funding impact statement – wastewater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Sources of operating funding</b>										
General rates	0	0	0	0	0	0	0	0	0	0
Targeted rates	12,508	13,301	14,851	16,205	18,295	18,991	21,295	22,564	24,938	25,718
Subsidies and grants for operating purposes	0	0	0	0	0	0	0	0	0	0
Local authorities fuel tax, fines, infringement fees and other	1	0	(2)	(1)	(3)	(2)	(5)	(5)	(8)	(8)
Fees and charges	8,003	8,814	9,382	10,164	10,848	11,230	12,169	13,153	13,777	14,659
<b>Total sources of operating funding</b>	<b>20,512</b>	<b>22,115</b>	<b>24,231</b>	<b>26,368</b>	<b>29,140</b>	<b>30,219</b>	<b>33,459</b>	<b>35,712</b>	<b>38,707</b>	<b>40,369</b>
<b>Applications of operating funding</b>										
Payments to staff and suppliers	11,647	12,188	12,725	13,901	14,624	14,700	16,135	19,235	17,696	18,643
Finance costs	1,538	1,614	2,034	2,651	3,240	3,923	4,633	5,342	6,101	7,143
Internal charges and overheads applied	47	49	50	51	52	53	54	55	56	57
Other operating funding applications	0	0	0	0	0	0	0	0	0	0
<b>Total applications of operating funding</b>	<b>13,233</b>	<b>13,851</b>	<b>14,809</b>	<b>16,604</b>	<b>17,916</b>	<b>18,676</b>	<b>20,822</b>	<b>24,631</b>	<b>23,853</b>	<b>25,842</b>
<b>Surplus/(deficit) of operating funding</b>	<b>7,279</b>	<b>8,264</b>	<b>9,422</b>	<b>9,764</b>	<b>11,224</b>	<b>11,543</b>	<b>12,637</b>	<b>11,081</b>	<b>14,854</b>	<b>14,527</b>
<b>Source of capital funding</b>										
Subsidies and grants for capital expenditure	378	224	3,544	5,316	0	0	0	0	0	0
Development and financial contributions	1,134	1,839	1,878	1,916	1,953	3,717	3,790	3,868	3,944	4,026
Increase/(decrease) in debt	2,377	6,124	9,891	8,247	10,065	8,920	11,314	13,527	14,481	15,943
Gross proceeds from sales of assets	0	0	0	0	0	0	0	0	0	0
Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
<b>Total sources of capital funding</b>	<b>3,889</b>	<b>8,187</b>	<b>15,313</b>	<b>15,479</b>	<b>12,018</b>	<b>12,637</b>	<b>15,104</b>	<b>17,395</b>	<b>18,425</b>	<b>19,969</b>
<b>Applications of capital funding</b>										
Capital expenditure - to meet additional demand	1,700	9,405	13,373	10,637	1,460	941	4,793	5,676	11,736	13,217
Capital expenditure - to improve levels of services	5,250	3,085	2,922	4,863	7,708	7,328	5,392	6,159	7,987	12,046
Capital expenditure - to replace existing assets	4,219	3,962	8,441	9,745	14,074	15,911	17,557	16,640	13,557	9,233
Increase/(decrease) in reserves	0	0	0	0	0	0	0	0	0	0
Increase/(decrease) in investments	0	0	0	0	0	0	0	0	0	0
<b>Total applications of capital funding</b>	<b>11,169</b>	<b>16,452</b>	<b>24,736</b>	<b>25,245</b>	<b>23,242</b>	<b>24,180</b>	<b>27,742</b>	<b>28,475</b>	<b>33,280</b>	<b>34,496</b>
<b>Surplus/(deficit) of capital funding</b>	<b>(7,280)</b>	<b>(8,265)</b>	<b>(9,423)</b>	<b>(9,766)</b>	<b>(11,224)</b>	<b>(11,543)</b>	<b>(12,638)</b>	<b>(11,080)</b>	<b>(14,855)</b>	<b>(14,527)</b>
<b>Funding balance</b>	<b>(1)</b>	<b>(1)</b>	<b>(1)</b>	<b>(2)</b>	<b>0</b>	<b>0</b>	<b>(1)</b>	<b>1</b>	<b>(1)</b>	<b>0</b>

Projected funding impact statement – stormwater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Sources of operating funding</b>										
General rates	0	0	0	0	0	0	0	0	0	0
Targeted rates	7,663	8,376	9,080	9,568	10,216	10,727	11,360	11,956	12,781	13,057
Subsidies and grants for operating purposes	70	0	0	0	0	0	0	0	0	0
Local authorities fuel tax, fines, infringement fees and other	0	0	0	0	0	0	0	0	0	0
Fees and charges	5	5	5	6	6	6	6	6	6	6
<b>Total sources of operating funding</b>	<b>7,738</b>	<b>8,381</b>	<b>9,085</b>	<b>9,574</b>	<b>10,222</b>	<b>10,733</b>	<b>11,366</b>	<b>11,962</b>	<b>12,787</b>	<b>13,063</b>
<b>Applications of operating funding</b>										
Payments to staff and suppliers	2,207	2,209	2,310	2,458	2,528	2,696	2,793	2,909	2,981	3,030
Finance costs	1,612	1,709	1,807	1,842	1,955	2,056	2,115	2,140	2,288	2,389
Internal charges and overheads applied	45	47	48	49	50	51	52	53	54	55
Other operating funding applications	0	0	0	0	0	0	0	0	0	0
<b>Total applications of operating funding</b>	<b>3,864</b>	<b>3,965</b>	<b>4,165</b>	<b>4,349</b>	<b>4,533</b>	<b>4,803</b>	<b>4,960</b>	<b>5,102</b>	<b>5,323</b>	<b>5,474</b>
<b>Surplus/(deficit) of operating funding</b>	<b>3,874</b>	<b>4,416</b>	<b>4,920</b>	<b>5,225</b>	<b>5,689</b>	<b>5,930</b>	<b>6,406</b>	<b>6,860</b>	<b>7,464</b>	<b>7,589</b>
<b>Source of capital funding</b>										
Subsidies and grants for capital expenditure	301	721	2,162	721	0	0	0	0	0	0
Development and financial contributions	1,009	1,746	1,779	1,812	1,843	3,498	3,560	3,626	3,691	3,761
Increase/(decrease) in debt	3,794	3,278	(1,329)	1,628	946	65	(341)	2,975	2,416	520
Gross proceeds from sales of assets	0	0	0	0	0	0	0	0	0	0
Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
<b>Total sources of capital funding</b>	<b>5,104</b>	<b>5,745</b>	<b>2,612</b>	<b>4,161</b>	<b>2,789</b>	<b>3,563</b>	<b>3,219</b>	<b>6,601</b>	<b>6,107</b>	<b>4,281</b>
<b>Applications of capital funding</b>										
Capital expenditure - to meet additional demand	1,804	1,299	2,650	2,069	329	222	226	2,246	3,440	2,957
Capital expenditure - to improve levels of services	3,696	2,034	3,581	6,018	7,546	8,458	8,924	10,710	9,328	8,085
Capital expenditure - to replace existing assets	3,480	6,826	1,301	1,297	603	814	475	505	803	828
Increase/(decrease) in reserves	0	0	0	0	0	0	0	0	0	0
Increase/(decrease) in investments	0	0	0	0	0	0	0	0	0	0
<b>Total applications of capital funding</b>	<b>8,980</b>	<b>10,159</b>	<b>7,532</b>	<b>9,384</b>	<b>8,478</b>	<b>9,494</b>	<b>9,625</b>	<b>13,461</b>	<b>13,571</b>	<b>11,870</b>
<b>Surplus/(deficit) of capital funding</b>	<b>(3,876)</b>	<b>(4,414)</b>	<b>(4,920)</b>	<b>(5,223)</b>	<b>(5,689)</b>	<b>(5,931)</b>	<b>(6,406)</b>	<b>(6,860)</b>	<b>(7,464)</b>	<b>(7,589)</b>
<b>Funding balance</b>	<b>(2)</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>(1)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Sources of operating funding</b>										
General rates	0	0	0	0	0	0	0	0	0	0
Targeted rates	36,363	38,927	42,579	45,150	49,447	51,467	55,610	58,429	63,745	65,296
Subsidies and grants for operating purposes	70	0	0	0	0	0	0	0	0	0
Local authorities fuel tax, fines, infringement fees and other	1	0	(2)	(1)	(3)	(2)	(5)	(5)	(8)	(8)
Fees and charges	8,065	8,877	9,447	10,231	10,916	11,299	12,240	13,225	13,850	14,724
<b>Total sources of operating funding</b>	<b>44,499</b>	<b>47,804</b>	<b>52,024</b>	<b>55,380</b>	<b>60,360</b>	<b>62,764</b>	<b>67,845</b>	<b>71,649</b>	<b>77,587</b>	<b>80,012</b>
<b>Applications of operating funding</b>										
Payments to staff and suppliers	22,757	23,656	24,754	26,341	27,529	27,989	29,828	33,328	32,660	33,982
Finance costs	4,692	4,875	5,499	6,361	7,312	8,362	9,181	9,939	11,161	12,586
Internal charges and overheads applied	132	138	141	145	147	150	154	155	159	160
Other operating funding applications	0	0	0	0	0	0	0	0	0	0
<b>Total applications of operating funding</b>	<b>27,582</b>	<b>28,669</b>	<b>30,394</b>	<b>32,847</b>	<b>34,987</b>	<b>36,500</b>	<b>39,163</b>	<b>43,422</b>	<b>43,980</b>	<b>46,728</b>
<b>Surplus/(deficit) of operating funding</b>	<b>16,917</b>	<b>19,135</b>	<b>21,630</b>	<b>22,533</b>	<b>25,373</b>	<b>26,264</b>	<b>28,682</b>	<b>28,227</b>	<b>33,607</b>	<b>33,284</b>
<b>Source of capital funding</b>										
Subsidies and grants for capital expenditure	1,558	1,114	5,706	6,715	0	0	0	0	0	0
Development and financial contributions	2,760	4,563	4,656	4,748	4,836	9,200	9,374	9,561	9,743	9,940
Increase/(decrease) in debt	7,670	11,327	11,423	13,593	16,100	8,830	9,471	22,291	23,227	18,606
Gross proceeds from sales of assets	0	0	0	0	0	0	0	0	0	0
Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
<b>Total sources of capital funding</b>	<b>11,988</b>	<b>17,004</b>	<b>21,785</b>	<b>25,056</b>	<b>20,936</b>	<b>18,030</b>	<b>18,845</b>	<b>31,852</b>	<b>32,970</b>	<b>28,546</b>
<b>Applications of capital funding</b>										
Capital expenditure - to meet additional demand	6,660	15,108	21,635	17,616	5,619	3,822	7,444	11,883	18,808	21,505
Capital expenditure - to improve levels of services	13,250	8,410	10,992	17,493	21,293	20,301	18,565	21,204	20,930	23,774
Capital expenditure - to replace existing assets	8,999	12,621	10,789	12,479	19,397	20,172	21,520	26,991	26,841	16,550
Increase/(decrease) in reserves	0	0	0	0	0	0	0	0	0	0
Increase/(decrease) in investments	0	0	0	0	0	0	0	0	0	0
<b>Total applications of capital funding</b>	<b>28,909</b>	<b>36,139</b>	<b>43,416</b>	<b>47,588</b>	<b>46,309</b>	<b>44,295</b>	<b>47,529</b>	<b>60,078</b>	<b>66,579</b>	<b>61,829</b>
<b>Surplus/(deficit) of capital funding</b>	<b>(16,921)</b>	<b>(19,135)</b>	<b>(21,631)</b>	<b>(22,532)</b>	<b>(25,373)</b>	<b>(26,265)</b>	<b>(28,684)</b>	<b>(28,226)</b>	<b>(33,609)</b>	<b>(33,283)</b>
<b>Funding balance</b>	<b>(4)</b>	<b>0</b>	<b>(1)</b>	<b>1</b>	<b>0</b>	<b>(1)</b>	<b>(2)</b>	<b>1</b>	<b>(2)</b>	<b>1</b>

Tables provided by DIA with some data input from NCC

**Projected statement of comprehensive revenue and expense**

Projected statement of profit and loss - drinking water	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Revenue</b>										
Operating revenue	16,249	17,308	18,708	19,438	20,998	21,812	23,020	23,975	26,093	26,580
Other revenue	1,496	1,147	999	1,698	1,040	1,985	2,024	2,067	2,108	2,153
<b>Total revenue</b>	<b>17,745</b>	<b>18,455</b>	<b>19,707</b>	<b>21,136</b>	<b>22,038</b>	<b>23,797</b>	<b>25,044</b>	<b>26,042</b>	<b>28,201</b>	<b>28,733</b>
<b>Expenses</b>										
Operating expenses	8,903	9,259	9,719	9,982	10,377	10,593	10,900	11,184	11,983	12,309
Finance costs	1,541	1,552	1,657	1,868	2,116	2,382	2,434	2,457	2,772	3,054
Overheads and support costs	41	42	44	44	45	46	47	48	49	49
Depreciation & amortisation	7,997	8,314	8,588	8,904	9,251	9,604	10,001	10,421	10,806	11,195
<b>Total expenses</b>	<b>18,482</b>	<b>19,167</b>	<b>20,008</b>	<b>20,798</b>	<b>21,789</b>	<b>22,625</b>	<b>23,382</b>	<b>24,110</b>	<b>25,610</b>	<b>26,607</b>
<b>Net surplus/(deficit)</b>	<b>(737)</b>	<b>(712)</b>	<b>(301)</b>	<b>338</b>	<b>249</b>	<b>1,172</b>	<b>1,662</b>	<b>1,932</b>	<b>2,591</b>	<b>2,126</b>
Revaluation of infrastructure assets	8,064	6,153	6,962	6,964	6,969	6,857	7,043	7,039	7,396	7,284
<b>Total comprehensive income</b>	<b>7,327</b>	<b>5,441</b>	<b>6,661</b>	<b>7,302</b>	<b>7,218</b>	<b>8,029</b>	<b>8,705</b>	<b>8,971</b>	<b>9,987</b>	<b>9,410</b>
<b>Cash surplus/(deficit) from operations (excl depreciation)</b>	<b>7,260</b>	<b>7,602</b>	<b>8,287</b>	<b>9,242</b>	<b>9,500</b>	<b>10,776</b>	<b>11,663</b>	<b>12,353</b>	<b>13,397</b>	<b>13,321</b>

Projected statement of profit and loss – wastewater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Revenue</b>										
Operating revenue	20,512	22,115	24,231	26,368	29,140	30,219	33,459	35,712	38,707	40,369
Other revenue	1,512	2,063	5,422	7,232	1,953	3,717	3,790	3,868	3,944	4,026
<b>Total revenue</b>	<b>22,024</b>	<b>24,178</b>	<b>29,653</b>	<b>33,600</b>	<b>31,093</b>	<b>33,936</b>	<b>37,249</b>	<b>39,580</b>	<b>42,651</b>	<b>44,395</b>
<b>Expenses</b>										
Operating expenses	11,647	12,188	12,725	13,901	14,624	14,700	16,135	19,235	17,696	18,643
Finance costs	1,538	1,614	2,034	2,651	3,240	3,923	4,633	5,342	6,101	7,143
Overheads and support costs	47	49	50	51	52	53	54	55	56	57
Depreciation & amortisation	10,612	11,066	11,386	11,925	12,534	12,989	13,431	13,918	14,437	14,965
<b>Total expenses</b>	<b>23,845</b>	<b>24,917</b>	<b>26,195</b>	<b>28,529</b>	<b>30,450</b>	<b>31,665</b>	<b>34,253</b>	<b>38,549</b>	<b>38,290</b>	<b>40,807</b>
<b>Net surplus/(deficit)</b>	<b>(1,821)</b>	<b>(739)</b>	<b>3,458</b>	<b>5,071</b>	<b>643</b>	<b>2,271</b>	<b>2,996</b>	<b>1,031</b>	<b>4,361</b>	<b>3,588</b>
Revaluation of infrastructure assets	8,738	6,703	7,776	7,917	7,962	7,978	8,415	8,480	9,032	9,005
<b>Total comprehensive income</b>	<b>6,917</b>	<b>5,964</b>	<b>11,234</b>	<b>12,988</b>	<b>8,605</b>	<b>10,249</b>	<b>11,411</b>	<b>9,511</b>	<b>13,393</b>	<b>12,593</b>
<b>Cash surplus/(deficit) from operations (excl depreciation)</b>	<b>8,791</b>	<b>10,327</b>	<b>14,844</b>	<b>16,996</b>	<b>13,177</b>	<b>15,260</b>	<b>16,427</b>	<b>14,949</b>	<b>18,798</b>	<b>18,553</b>

Projected statement of profit and loss – stormwater (\$000)	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Revenue</b>										
Operating revenue	7,738	8,381	9,085	9,574	10,222	10,733	11,366	11,962	12,787	13,063
Other revenue	1,310	2,467	3,941	2,533	1,843	3,498	3,560	3,626	3,691	3,761
<b>Total revenue</b>	<b>9,048</b>	<b>10,848</b>	<b>13,026</b>	<b>12,107</b>	<b>12,065</b>	<b>14,231</b>	<b>14,926</b>	<b>15,588</b>	<b>16,478</b>	<b>16,824</b>
<b>Expenses</b>										
Operating expenses	2,207	2,209	2,310	2,458	2,528	2,696	2,793	2,909	2,981	3,030
Finance costs	1,612	1,709	1,807	1,842	1,955	2,056	2,115	2,140	2,288	2,389
Overheads and support costs	45	47	48	49	50	51	52	53	54	55
Depreciation & amortisation	4,983	5,230	5,407	5,609	5,826	6,034	6,306	6,636	6,975	7,285
<b>Total expenses</b>	<b>8,847</b>	<b>9,195</b>	<b>9,572</b>	<b>9,958</b>	<b>10,359</b>	<b>10,837</b>	<b>11,266</b>	<b>11,738</b>	<b>12,298</b>	<b>12,759</b>
<b>Net surplus/(deficit)</b>	<b>201</b>	<b>1,653</b>	<b>3,454</b>	<b>2,149</b>	<b>1,706</b>	<b>3,394</b>	<b>3,660</b>	<b>3,850</b>	<b>4,180</b>	<b>4,065</b>
Revaluation of infrastructure assets	9,256	7,136	8,048	8,025	7,950	7,866	8,140	8,089	8,421	8,285
<b>Total comprehensive income</b>	<b>9,457</b>	<b>8,789</b>	<b>11,502</b>	<b>10,174</b>	<b>9,656</b>	<b>11,260</b>	<b>11,800</b>	<b>11,939</b>	<b>12,601</b>	<b>12,350</b>
<b>Cash surplus/(deficit) from operations (excl depreciation)</b>	<b>5,184</b>	<b>6,883</b>	<b>8,861</b>	<b>7,758</b>	<b>7,532</b>	<b>9,428</b>	<b>9,966</b>	<b>10,486</b>	<b>11,155</b>	<b>11,350</b>

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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Revenue</b>										
Operating revenue	44,499	47,804	52,024	55,380	60,360	62,764	67,845	71,649	77,587	80,012
Other revenue	4,318	5,677	10,362	11,463	4,836	9,200	9,374	9,561	9,743	9,940
<b>Total revenue</b>	<b>48,817</b>	<b>53,481</b>	<b>62,386</b>	<b>66,843</b>	<b>65,196</b>	<b>71,964</b>	<b>77,219</b>	<b>81,210</b>	<b>87,330</b>	<b>89,952</b>
<b>Expenses</b>										
Operating expenses	22,757	23,656	24,754	26,341	27,529	27,989	29,828	33,328	32,660	33,982
Finance costs	4,692	4,875	5,499	6,361	7,312	8,362	9,181	9,939	11,161	12,586
Overheads and support costs	132	138	141	145	147	150	154	155	159	160
Depreciation & amortisation	23,592	24,610	25,381	26,438	27,611	28,627	29,738	30,975	32,218	33,445
<b>Total expenses</b>	<b>51,174</b>	<b>53,279</b>	<b>55,775</b>	<b>59,285</b>	<b>62,598</b>	<b>65,127</b>	<b>68,901</b>	<b>74,397</b>	<b>76,198</b>	<b>80,173</b>
<b>Net surplus/(deficit)</b>	<b>(2,357)</b>	<b>202</b>	<b>6,611</b>	<b>7,558</b>	<b>2,598</b>	<b>6,837</b>	<b>8,318</b>	<b>6,813</b>	<b>11,132</b>	<b>9,779</b>
Revaluation of infrastructure assets	26,058	19,992	22,786	22,906	22,881	22,701	23,598	23,608	24,849	24,574
<b>Total comprehensive income</b>	<b>23,701</b>	<b>20,194</b>	<b>29,397</b>	<b>30,464</b>	<b>25,479</b>	<b>29,538</b>	<b>31,916</b>	<b>30,421</b>	<b>35,981</b>	<b>34,353</b>
<b>Cash surplus/(deficit) from operations (excl depreciation)</b>	<b>21,235</b>	<b>24,812</b>	<b>31,992</b>	<b>33,996</b>	<b>30,209</b>	<b>35,464</b>	<b>38,056</b>	<b>37,788</b>	<b>43,350</b>	<b>43,224</b>

**Projected statement of cashflows**

Projected statement of cashflows – drinking water	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Cashflows from operating activities</b>										
Cash surplus/(deficit) from operations	7,260	7,602	8,287	9,242	9,500	10,776	11,663	12,353	13,397	13,321
<b>Net cashflows from operating activities</b>	7,260	7,602	8,287	9,242	9,500	10,776	11,663	12,353	13,397	13,321
<b>Cashflows from investing activities</b>										
Capital expenditure – infrastructure assets	(8,760)	(9,528)	(11,148)	(12,959)	(14,589)	(10,621)	(10,162)	(18,142)	(19,728)	(15,463)
<b>Net cashflows from investment activities</b>	(8,760)	(9,528)	(11,148)	(12,959)	(14,589)	(10,621)	(10,162)	(18,142)	(19,728)	(15,463)
<b>Cashflows from financing activities</b>										
New borrowings	1,499	1,925	2,861	3,718	5,089	(155)	(1,502)	5,789	6,330	2,143
<b>Net cashflows from financing activities</b>	1,499	1,925	2,861	3,718	5,089	(155)	(1,502)	5,789	6,330	2,143
<b>Net increase/(decrease) in cash and cash equivalents</b>	(1)	(1)	0	1	0	0	(1)	0	(1)	1
Cash and cash equivalents at beginning of year	0	(1)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(3)
<b>Cash and cash equivalents at end of year</b>	(1)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(3)	(2)

Projected statement of cashflows - wastewater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Cashflows from operating activities</b>										
Cash surplus/(deficit) from operations	8,791	10,327	14,844	16,996	13,177	15,260	16,427	14,949	18,798	18,553
<b>Net cashflows from operating activities</b>	8,791	10,327	14,844	16,996	13,177	15,260	16,427	14,949	18,798	18,553
<b>Cashflows from investing activities</b>										
Capital expenditure – infrastructure assets	(11,169)	(16,452)	(24,736)	(25,245)	(23,242)	(24,180)	(27,742)	(28,475)	(33,280)	(34,496)
<b>Net cashflows from investment activities</b>	(11,169)	(16,452)	(24,736)	(25,245)	(23,242)	(24,180)	(27,742)	(28,475)	(33,280)	(34,496)
<b>Cashflows from financing activities</b>										
New borrowings	2,377	6,124	9,891	8,247	10,065	8,920	11,314	13,527	14,481	15,943
<b>Net cashflows from financing activities</b>	2,377	6,124	9,891	8,247	10,065	8,920	11,314	13,527	14,481	15,943
<b>Net increase/(decrease) in cash and cash equivalents</b>	(1)	(1)	(1)	(2)	0	0	(1)	1	(1)	0
Cash and cash equivalents at beginning of year	0	(1)	(2)	(3)	(5)	(5)	(5)	(6)	(5)	(6)
<b>Cash and cash equivalents at end of year</b>	(1)	(2)	(3)	(5)	(5)	(5)	(6)	(5)	(6)	(6)

Tables provided by DIA with some data input from NCC

Projected statement of cashflows - stormwater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Cashflows from operating activities</b>										
Cash surplus/(deficit) from operations	5,184	6,883	8,861	7,758	7,532	9,428	9,966	10,486	11,155	11,350
<b>Net cashflows from operating activities</b>	5,184	6,883	8,861	7,758	7,532	9,428	9,966	10,486	11,155	11,350
<b>Cashflows from investing activities</b>										
Capital expenditure – infrastructure assets	(8,980)	(10,159)	(7,532)	(9,384)	(8,478)	(9,494)	(9,625)	(13,461)	(13,571)	(11,870)
<b>Net cashflows from investment activities</b>	(8,980)	(10,159)	(7,532)	(9,384)	(8,478)	(9,494)	(9,625)	(13,461)	(13,571)	(11,870)
<b>Cashflows from financing activities</b>										
New borrowings	3,794	3,278	(1,329)	1,628	946	65	(341)	2,975	2,416	520
<b>Net cashflows from financing activities</b>	3,794	3,278	(1,329)	1,628	946	65	(341)	2,975	2,416	520
<b>Net increase/(decrease) in cash and cash equivalents</b>	(2)	2	0	2	0	(1)	0	0	0	0
Cash and cash equivalents at beginning of year	0	(2)	0	0	2	2	1	1	1	1
<b>Cash and cash equivalents at end of year</b>	(2)	0	0	2	2	1	1	1	1	1

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
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Cashflows from operating activities</b>										
Cash surplus/(deficit) from operations	21,235	24,812	31,992	33,996	30,209	35,464	38,056	37,788	43,350	43,224
<b>Net cashflows from operating activities</b>	21,235	24,812	31,992	33,996	30,209	35,464	38,056	37,788	43,350	43,224
<b>Cashflows from investing activities</b>										
Capital expenditure – infrastructure assets	(28,909)	(36,139)	(43,416)	(47,588)	(46,309)	(44,295)	(47,529)	(60,078)	(66,579)	(61,829)
<b>Net cashflows from investment activities</b>	(28,909)	(36,139)	(43,416)	(47,588)	(46,309)	(44,295)	(47,529)	(60,078)	(66,579)	(61,829)
<b>Cashflows from financing activities</b>										
New borrowings	7,670	11,327	11,423	13,593	16,100	8,830	9,471	22,291	23,227	18,606
<b>Net cashflows from financing activities</b>	7,670	11,327	11,423	13,593	16,100	8,830	9,471	22,291	23,227	18,606
<b>Net increase/(decrease) in cash and cash equivalents</b>	(4)	0	(1)	1	0	(1)	(2)	1	(2)	1
Cash and cash equivalents at beginning of year	0	(4)	(4)	(5)	(4)	(4)	(5)	(7)	(6)	(8)
<b>Cash and cash equivalents at end of year</b>	(4)	(4)	(5)	(4)	(4)	(5)	(7)	(6)	(8)	(7)

**Projected statement of financial position**

Projected statement of financial position – drinking water	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Assets</b>										
Cash and cash equivalents	(1)	(2)	(2)	(1)	(1)	(1)	(2)	(2)	(3)	(2)
Infrastructure assets	292,958	300,325	309,847	320,866	333,173	341,047	348,251	363,011	379,329	390,881
<b>Total assets</b>	<b>292,957</b>	<b>300,323</b>	<b>309,845</b>	<b>320,865</b>	<b>333,172</b>	<b>341,046</b>	<b>348,249</b>	<b>363,009</b>	<b>379,326</b>	<b>390,879</b>
<b>Liabilities</b>										
Borrowings – non-current portion	38,390	40,315	43,176	46,894	51,983	51,828	50,326	56,115	62,445	64,588
<b>Total liabilities</b>	<b>38,390</b>	<b>40,315</b>	<b>43,176</b>	<b>46,894</b>	<b>51,983</b>	<b>51,828</b>	<b>50,326</b>	<b>56,115</b>	<b>62,445</b>	<b>64,588</b>
<b>Net assets</b>	<b>254,567</b>	<b>260,008</b>	<b>266,669</b>	<b>273,971</b>	<b>281,189</b>	<b>289,218</b>	<b>297,923</b>	<b>306,894</b>	<b>316,881</b>	<b>326,291</b>
<b>Equity</b>										
Revaluation reserves	256,688	262,841	269,803	276,767	283,736	290,593	297,636	304,675	312,071	319,355
Other reserves	(2,121)	(2,833)	(3,134)	(2,796)	(2,547)	(1,375)	287	2,219	4,810	6,936
<b>Total equity</b>	<b>254,567</b>	<b>260,008</b>	<b>266,669</b>	<b>273,971</b>	<b>281,189</b>	<b>289,218</b>	<b>297,923</b>	<b>306,894</b>	<b>316,881</b>	<b>326,291</b>

Projected statement of financial position - wastewater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Assets</b>										
Cash and cash equivalents	(1)	(2)	(3)	(5)	(5)	(5)	(6)	(5)	(6)	(6)
Infrastructure assets	374,234	386,323	407,449	428,686	447,356	466,525	489,251	512,288	540,163	568,699
<b>Total assets</b>	<b>374,233</b>	<b>386,321</b>	<b>407,446</b>	<b>428,681</b>	<b>447,351</b>	<b>466,520</b>	<b>489,245</b>	<b>512,283</b>	<b>540,157</b>	<b>568,693</b>
<b>Liabilities</b>										
Borrowings – non-current portion	31,789	37,913	47,804	56,051	66,116	75,036	86,350	99,877	114,358	130,301
<b>Total liabilities</b>	<b>31,789</b>	<b>37,913</b>	<b>47,804</b>	<b>56,051</b>	<b>66,116</b>	<b>75,036</b>	<b>86,350</b>	<b>99,877</b>	<b>114,358</b>	<b>130,301</b>
<b>Net assets</b>	<b>342,444</b>	<b>348,408</b>	<b>359,642</b>	<b>372,630</b>	<b>381,235</b>	<b>391,484</b>	<b>402,895</b>	<b>412,406</b>	<b>425,799</b>	<b>438,392</b>
<b>Equity</b>										
Revaluation reserves	305,018	311,721	319,497	327,414	335,376	343,354	351,769	360,249	369,281	378,286
Other reserves	37,426	36,687	40,145	45,216	45,859	48,130	51,126	52,157	56,518	60,106
<b>Total equity</b>	<b>342,444</b>	<b>348,408</b>	<b>359,642</b>	<b>372,630</b>	<b>381,235</b>	<b>391,484</b>	<b>402,895</b>	<b>412,406</b>	<b>425,799</b>	<b>438,392</b>

Projected statement of financial position - stormwater	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Assets</b>										
Cash and cash equivalents	(2)	0	0	2	2	1	1	1	1	1
Infrastructure assets	315,979	328,044	338,217	350,017	360,619	371,945	383,404	398,318	413,335	426,205
<b>Total assets</b>	<b>315,977</b>	<b>328,044</b>	<b>338,217</b>	<b>350,019</b>	<b>360,621</b>	<b>371,946</b>	<b>383,405</b>	<b>398,319</b>	<b>413,336</b>	<b>426,206</b>
<b>Liabilities</b>										
Borrowings – non-current portion	35,080	38,358	37,029	38,657	39,603	39,668	39,327	42,302	44,718	45,238
<b>Total liabilities</b>	<b>35,080</b>	<b>38,358</b>	<b>37,029</b>	<b>38,657</b>	<b>39,603</b>	<b>39,668</b>	<b>39,327</b>	<b>42,302</b>	<b>44,718</b>	<b>45,238</b>
<b>Net assets</b>	<b>280,897</b>	<b>289,686</b>	<b>301,188</b>	<b>311,362</b>	<b>321,018</b>	<b>332,278</b>	<b>344,078</b>	<b>356,017</b>	<b>368,618</b>	<b>380,968</b>
<b>Equity</b>										
Revaluation reserves	258,237	265,373	273,421	281,446	289,396	297,262	305,402	313,491	321,912	330,197
Other reserves	22,660	24,313	27,767	29,916	31,622	35,016	38,676	42,526	46,706	50,771
<b>Total equity</b>	<b>280,897</b>	<b>289,686</b>	<b>301,188</b>	<b>311,362</b>	<b>321,018</b>	<b>332,278</b>	<b>344,078</b>	<b>356,017</b>	<b>368,618</b>	<b>380,968</b>

Projected statement of financial position – water services	FY2024/25	FY2025/26	FY2026/27	FY2027/28	FY2028/29	FY2029/30	FY2030/31	FY2031/32	FY2032/33	FY2033/34
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
<b>Assets</b>										
Cash and cash equivalents	(4)	(4)	(5)	(4)	(4)	(5)	(7)	(6)	(8)	(7)
Infrastructure assets	983,171	1,014,692	1,055,513	1,099,569	1,141,148	1,179,517	1,220,906	1,273,617	1,332,827	1,385,785
<b>Total assets</b>	<b>983,167</b>	<b>1,014,688</b>	<b>1,055,508</b>	<b>1,099,565</b>	<b>1,141,144</b>	<b>1,179,512</b>	<b>1,220,899</b>	<b>1,273,611</b>	<b>1,332,819</b>	<b>1,385,778</b>
<b>Liabilities</b>										
Borrowings – non-current portion	105,259	116,586	128,009	141,602	157,702	166,532	176,003	198,294	221,521	240,127
<b>Total liabilities</b>	<b>105,259</b>	<b>116,586</b>	<b>128,009</b>	<b>141,602</b>	<b>157,702</b>	<b>166,532</b>	<b>176,003</b>	<b>198,294</b>	<b>221,521</b>	<b>240,127</b>
<b>Net assets</b>	<b>877,908</b>	<b>898,102</b>	<b>927,499</b>	<b>957,963</b>	<b>983,442</b>	<b>1,012,980</b>	<b>1,044,896</b>	<b>1,075,317</b>	<b>1,111,298</b>	<b>1,145,651</b>
<b>Equity</b>										
Revaluation reserves	819,943	839,935	862,721	885,627	908,508	931,209	954,807	978,415	1,003,264	1,027,838
Other reserves	57,965	58,167	64,778	72,336	74,934	81,771	90,089	96,902	108,034	117,813
<b>Total equity</b>	<b>877,908</b>	<b>898,102</b>	<b>927,499</b>	<b>957,963</b>	<b>983,442</b>	<b>1,012,980</b>	<b>1,044,896</b>	<b>1,075,317</b>	<b>1,111,298</b>	<b>1,145,651</b>

## Water Services Delivery Plan: additional information

### Additional disclosures to support Plan

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

## Significant capital projects

Significant capital projects										
Significant 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
<b>Projects to meet additional demand</b>										
NCC - TDC link	0	0	0	0	109	112	114	1,745	1,780	0
Suffolk Rd between Saxton and Ngawhatu upgrade	0	0	0	0	0	0	0	58	119	121
Maitai Development	270	102	680	2,141	2,243	168	171	175	0	0
Bayview Development	50	153	994	107	547	559	0	0	0	0
IAF Bridge St	385	1,686	2,783	2,259	0	0	0	0	0	0
IAF Collingwood St	859	0	0	0	0	0	0	0	0	0
IAF Halifax St	1,226	1,253	0	0	0	0	0	0	0	0
IAF Rutherford St	22	929	0	0	0	0	0	0	0	0
Atawhai reservoir	0	0	0	0	219	112	0	873	712	0
Ngawhatu Valley high level reservoir	0	0	105	166	170	1,117	1,365	0	0	0
<b>Total investment to meet additional demand</b>	<b>2,812</b>	<b>4,123</b>	<b>4,562</b>	<b>4,673</b>	<b>3,288</b>	<b>2,068</b>	<b>1,650</b>	<b>2,851</b>	<b>2,611</b>	<b>121</b>
<b>Projects to improve levels of services</b>										
Toi Toi St ridermain	0	0	0	0	0	0	0	58	119	363
Atawhai trunkmain	50	153	209	1,606	2,736	2,793	2,852	0	0	0
Maitai pumpstation upgrade	100	51	1,047	1,606	1,094	559	0	0	0	0
Atawhai No.2 reservoir	750	1,533	1,727	2,677	1,094	0	0	0	0	0
Dam upgrades	2,174	511	523	0	0	0	0	0	0	0
WTP new clear water reservoir	0	0	0	0	109	168	171	1,745	1,780	0
<b>Total investment to meet improve levels of services</b>	<b>3,074</b>	<b>2,248</b>	<b>3,506</b>	<b>5,889</b>	<b>5,033</b>	<b>3,520</b>	<b>3,023</b>	<b>1,803</b>	<b>1,899</b>	<b>363</b>

<b>Projects to replace existing assets</b>										
Maitai raw water pipeline renewal and upgrade	0	0	0	107	109	112	114	582	1,187	3,023
Pipe renewals and upgrades	285	1,313	298	305	2,172	2,217	2,264	2,850	2,907	2,963
Washington Valley renewal and upgrade	50	0	0	0	0	0	114	2,909	2,967	0
Roding pipeline	0	0	0	0	126	240	0	0	0	0
Konini Street renewal	0	51	0	54	875	0	0	0	0	0
Nayland Rd between Aldinga and Songer St	200	0	0	0	0	0	0	0	0	0
WTP membranes renewal	0	0	0	0	0	0	114	3,490	5,340	0
Thompson Tc reservoir refurbishment (electric/building)	250	102	209	107	0	0	0	0	0	0
<b>Total investment to replace existing assets</b>	<b>785</b>	<b>1,466</b>	<b>507</b>	<b>573</b>	<b>3,282</b>	<b>2,569</b>	<b>2,606</b>	<b>9,831</b>	<b>12,401</b>	<b>5,986</b>
<b>Total investment in drinking water assets</b>	<b>6,671</b>	<b>7,837</b>	<b>8,575</b>	<b>11,135</b>	<b>11,603</b>	<b>8,157</b>	<b>7,279</b>	<b>14,485</b>	<b>16,911</b>	<b>6,470</b>

<b>Infrastructure Strategy 2024-54</b>			
Water	Primary Clarifier	\$22M	2035–40
Water	Water Pipe Renewal Programme	\$155M	2024–54
Water	WTP Membrane Renewals	\$23.7M	2030–54
Water	WTP Headworks Renewals/Upgrades	\$36.6M	2024–54
Water	WTP Renewals	\$18.3M	2024–54
Water	Maitai Raw Water Pipeline Renewal	\$38M	2027–41

Significant 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
<b>Projects to meet additional demand</b>										
Saxton Rd sewer upgrade	0	0	0	0	0	0	0	233	3,560	3,386
Central City intensification capacity increases	0	0	0	0	0	0	0	0	1,305	1,935
Ngawhatu Valley TM - Stage 2	0	0	0	0	55	223	3,422	3,199	0	0
Mahitahi Development	740	4,088	2,630	1,071	1,094	0	0	0	0	0
Bayview Development	0	0	0	0	0	223	1,369	1,408	0	0
IAF pipeline upgrade (Bridge St)	468	4,706	2,239	1,572	0	0	0	0	0	0
IAF Paru Paru pumpstation upgrade	500	429	8,391	8,584	0	0	0	0	0	0
NWWTP replacement	0	613	785	0	0	0	0	582	7,120	7,255
<b>Total investment to meet additional demand</b>	<b>1,708</b>	<b>9,836</b>	<b>14,045</b>	<b>11,227</b>	<b>1,149</b>	<b>446</b>	<b>4,791</b>	<b>5,422</b>	<b>11,985</b>	<b>12,576</b>
<b>Projects to improve levels of services</b>										
Quarantine Rd pumpstation/catchment upgrades	1,000	0	0	0	0	0	0	0	0	121
Washington Valley sewer upgrade	40	10	0	0	0	0	114	2,327	2,373	0
Washington/Hastings to Paru Paru pump station capacity improvements	0	0	0	535	1,641	1,676	0	0	0	0
NWWTP inlet work bypass	0	0	0	107	1,094	0	0	0	0	0
<b>Total investment to meet improve levels of services</b>	<b>1,040</b>	<b>10</b>	<b>0</b>	<b>642</b>	<b>2,735</b>	<b>1,676</b>	<b>114</b>	<b>2,327</b>	<b>2,373</b>	<b>121</b>
<b>Projects to replace existing assets</b>										
Pipe renewals and upgrades	500	511	523	2,141	2,188	2,234	1,141	1,745	2,373	3,023
Mount & Konini St renewal	50	0	0	0	109	894	0	0	0	0
Emano & Murphy St pipe renewal and upgrade	0	0	0	0	0	0	3,422	3,490	3,560	3,628
Awatea/Quarantine/Airport RM network renewal and upgrade	0	0	0	0	0	0	0	0	0	121
Halifax St East pipe renewal	0	0	0	0	0	1,341	1,369	0	0	0
Atawhai rising main renewal and upgrade Stage 1	638	1,022	5,233	5,353	9,848	10,054	10,265	10,471	5,934	0
Vanguard St pump station	0	0	0	0	0	0	0	0	119	242
<b>Total investment to replace existing assets</b>	<b>1,188</b>	<b>1,533</b>	<b>5,756</b>	<b>7,494</b>	<b>12,145</b>	<b>14,523</b>	<b>16,197</b>	<b>15,706</b>	<b>11,986</b>	<b>7,014</b>
<b>Total investment in wastewater assets</b>	<b>3,936</b>	<b>11,379</b>	<b>19,801</b>	<b>19,363</b>	<b>16,029</b>	<b>16,645</b>	<b>21,102</b>	<b>23,455</b>	<b>26,344</b>	<b>19,711</b>

Infrastructure Strategy 2024-54					
Wastewater	Atawhai Rising Main Renewal	\$57M	2024-33		
Wastewater	Wastewater Pipe Renewals	\$300M	2024-54		
Wastewater	Natural Hazards Risk Assessment	\$23.5M	2027-54		
Wastewater	NWWTP Upgrade	\$149M	2025-54		
Wastewater	Wet Weather Overflow Mitigation Programme	Not specified	2024-54		
Wastewater	Quarantine Rd Sewer PS/Catchment Upgrades	\$27.2M	2024-39		
Wastewater	Emano/Murphy St Wastewater Pipe Renewal and Upgrades	\$16.6M	2030-35		
Wastewater	Awatea/Quarantine/Airport RM Network – Renewal and Upgrade	\$19.6M	2033-38		
Wastewater			City Centre RM Network – Renewal and Upgrade	\$28M	2036-43
Wastewater			Vanguard PS (Upgrade/Renewal)	\$23M	2032-37

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
<b>Projects to meet additional demand</b>										
York Tce	1,500	767	0	0	0	0	0	0	0	0
Intensification City Centre	0	0	0	0	219	112	114	1,745	1,780	1,209
IAF pipeline upgrade	330	562	2,621	2,093	0	0	0	0	0	0
<b>Total investment to meet additional demand</b>	<b>1,830</b>	<b>1,329</b>	<b>2,621</b>	<b>2,093</b>	<b>219</b>	<b>112</b>	<b>114</b>	<b>1,745</b>	<b>1,780</b>	<b>1,209</b>
<b>Projects to improve levels of services</b>										
Poynters Cr	0	0	0	54	109	279	285	58	0	0
Washington Valley upgrade	14	102	105	1,178	109	0	0	2,327	1,187	60
Main Rd Stoke/Arapiki Rd/Maitland Ave upgrade	0	0	0	0	0	223	228	233	831	1,814
Milton St between Grove and Cambria St	0	0	0	0	0	112	114	814	949	60
Mount and Konini St	0	51	105	1,178	1,094	112	0	0	0	0
Airlie St	342	0	0	0	0	0	0	0	0	0
Tahunanui Hills Catchment 9 - Moana Ave to Rocks Rd	150	511	2,093	2,141	2,188	1,676	57	0	0	0
Anglia and Scotia St	0	0	0	0	0	0	0	0	0	121
Brooklands	0	0	0	54	109	559	1,141	582	119	0
Cawthron Cr	0	0	0	0	109	168	1,939	58	0	0
Kowhai Ave	0	0	0	0	0	112	171	1,629	178	0
Rutherford St Stage2 - box culvert Examiner to Hardy St	0	0	0	0	0	0	0	0	0	242
Totara and Hutcheson	0	0	0	107	109	1,117	570	58	0	0
Toi Toi St upgrade	0	0	105	54	547	56	0	0	0	0
Strawbridge Square improvements	532	102	0	0	0	0	0	0	0	0
Vanguard St	0	0	0	0	0	0	114	116	119	1,209
Murphy and Emano St upgrade	100	102	105	107	2,188	2,234	2,281	2,327	2,373	121
The Wood upgrade	0	0	0	0	0	0	0	116	237	181
Tahunanui Hills Catchment 2 - Moncreiff Ave	412	0	0	0	0	0	0	0	0	0
Annesbrook Dr	0	0	0	0	0	0	0	116	119	846

Wastney Tc private drain programme	0	0	0	0	55	559	0	0	0	0
Bisley Ave	364	0	0	0	0	0	0	0	0	0
Tahunanui Hills - Maire Stream Stage 2	0	0	0	0	109	112	570	116	0	0
Flood Recovery 2022 intakes resilience Cleveland Tc	750	0	0	0	0	0	0	0	0	0
Flood Recovery 2022 intakes resilience Devenish PI	200	204	0	0	0	0	0	0	0	0
<b>Total investment to meet improve levels of services</b>	<b>2,864</b>	<b>1,072</b>	<b>2,513</b>	<b>4,873</b>	<b>6,726</b>	<b>7,319</b>	<b>7,470</b>	<b>8,550</b>	<b>6,112</b>	<b>4,654</b>
<b>Projects to replace existing assets</b>										
Renewals	50	102	105	161	164	279	285	291	593	605
Haven/St Vincent culvert renewal and upgrage	3,000	6,643	523	0	0	0	0	0	0	0
Atawhai SH6 culverts	100	102	523	535	219	0	0	0	0	0
<b>Total investment to replace existing assets</b>	<b>3,150</b>	<b>6,847</b>	<b>1,151</b>	<b>696</b>	<b>383</b>	<b>279</b>	<b>285</b>	<b>291</b>	<b>593</b>	<b>605</b>
<b>Total investment in stormwater assets</b>	<b>7,844</b>	<b>9,248</b>	<b>6,285</b>	<b>7,662</b>	<b>7,328</b>	<b>7,710</b>	<b>7,869</b>	<b>10,586</b>	<b>8,485</b>	<b>6,468</b>

Infrastructure Strategy 2024-54			
Stormwater	Stormwater Renewals	\$56.7M	2024-54
Stormwater	Haven Rd/St Vincent Culvert Renewal and Upgrade	\$10.1M	2024-27
Stormwater	Rutherford Stage 2 – Box Culvert Examiner to Hardy	\$12M	2033-40
Stormwater		Rutherford Stage 3 – Box Culvert Hardy to Saltwater Creek	\$14.3M 2040-47
Stormwater		Stoke STW Strategy Implementation	\$11.5M 2036-44
Stormwater	Port Hills STW Strategy Implementation	\$10.9M	2035-44
Stormwater	Atawhai SW Strategy Implementation	\$10.1M	2038-48
Stormwater	Freshwater Improvements Programme	\$7.5M	2024-54
Stormwater	Washington Valley Stormwater	\$10.1M	2024-37
Stormwater		Murphy/Emano Street Upgrade	\$10.5M 2024-34
Stormwater		The Wood Stormwater Upgrade	\$7M 2031-40
Stormwater		Tāhunanui Catchment 9 – Moana Ave to Rocks Rd	\$8.1M 2024-31

## Risks and assumptions

### Disclosure of risks and material assumptions for water services delivery

Parameters	Drinking supply	Wastewater	Stormwater
<p><b>Key Risks</b></p> <ul style="list-style-type: none"> <li>• Future water service delivery</li> <li>• Network performance</li> <li>• Regulatory compliance</li> <li>• Delivery of Capital Programme</li> <li>• Organisational capacity</li> <li>• Long term issues e.g. providing for growth, climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Amalgamation of local authorities or joint arrangements may impact funding availability for Nelson City residents.</li> <li>• Network operations may be impacted if materials degrade faster than anticipated.</li> <li>• Changes to environmental standards may impact location of raw water intakes and volumes of water able to be abstracted.</li> <li>• As renewal budgets increase programme delivery and affordability can be impacted by contractor availability.</li> <li>• Responding to growth and increasing renewal budgets may be impacted by in-house and consultant resources.</li> <li>• Growth in demand or climate change impacts – demand outstrips raw water source volume necessitating early development of fourth water source in Tasman District or upgrading the raw water delivery line.</li> </ul>	<ul style="list-style-type: none"> <li>• Amalgamation of local authorities or joint arrangements may impact funding availability for Nelson City residents.</li> <li>• Network performance may be impacted by older materials degrading at a faster rate than anticipated.</li> <li>• Changes to environmental standards may impact location of wastewater treatment plants and discharge of treated wastewater.</li> <li>• The activity has a significant rising main capital programme over the next ten years as well as increasing reticulation renewal budgets. This increase can be impacted by contractor availability.</li> <li>• Organisational capacity may be impacted by increasing capital expenditure and changes in central government water services delivery legislation.</li> <li>• Accelerated growth leading to wastewater volumes greater than treatment plant capacity will impact services. Climate change can impact operation of wastewater treatment plants through sea level rise and more extreme flooding.</li> </ul>	<ul style="list-style-type: none"> <li>• Amalgamation of local authorities or joint arrangements may impact funding availability for Nelson City residents.</li> <li>• Network performance may be impacted by older materials degrading at a faster rate than anticipated. Extreme storm events can impact stormwater channels and detention devices.</li> <li>• Changes to environmental standards may impact discharge of stormwater and require upgraded treatment prior to discharge.</li> <li>• Delivery of Capital Programme may be impacted by repairs post increasing numbers of storm events.</li> <li>• Organisational capacity may be impacted by changing levels of service and growth.</li> <li>• Growth can impact stormwater levels of service through increased demand on the network and development in secondary flow paths. Rapid expansion of the network can lead to affordability issues. Climate change is expected to significantly impact the network through higher intensity rain events overwhelming older parts of the network leading to damage to properties.</li> </ul>

<p><b>Significant assumptions</b></p> <ul style="list-style-type: none"> <li>• Future water service delivery</li> <li>• Network performance</li> <li>• Regulatory compliance</li> <li>• Delivery of Capital Programme</li> <li>• Organisational capacity</li> <li>• Long term issues e.g. providing for growth, climate change</li> </ul>	<p>In addition to general forecasting assumptions in the LTP2024-34 that apply to all of Council’s work, the following specific assumptions apply to the water supply activity:</p> <ul style="list-style-type: none"> <li>• Renewals will be continued at a rate that is sustainable, based on consideration of both resource and financial aspects.</li> <li>• On average, the change in Nelson’s climate will remain relatively consistent for the next decade, with the likelihood of more severe and frequent extreme weather events continuing to increase.</li> <li>• Future resource consents for the existing sources of water supply and abstraction volumes will be granted.</li> <li>• There will be reductions in water losses.</li> <li>• Water supply will continue to be funded from water charges and, consistent with Council’s financial policies, most of the capital expenditure will be funded from borrowings.</li> <li>• Council will provide education and promotion of the importance of water conservation; however the demand for water is expected to continue to be primarily managed through Council’s water metering and charging system.</li> <li>• Existing treatment plant membranes will continue to operate satisfactorily.</li> </ul>	<p>In addition to general forecasting assumptions in the LTP2024-34 that apply to all of Council’s work, the following specific assumptions apply to the wastewater activity:</p> <ul style="list-style-type: none"> <li>• The typical useful lives from the NZ Infrastructure Asset Valuation and Depreciation Guidelines – Version 1.0 have been used as a guide in determining base lives, with variations if needed to reflect local experience (such as the shorter life of the Atawhai rising main).</li> <li>• Where an asset has exceeded its nominated base life, and is shown to be in good condition, a residual life of five years is assumed.</li> <li>• On average, the change in Nelson’s climate will remain relatively consistent for the next decade, with the likelihood of more severe and frequent extreme weather events continuing to increase.</li> <li>• Wastewater activities will continue to be funded from wastewater charges, and most capital expenditure will be borrowed. Development contributions will fund the increased provision of services related to population growth.</li> <li>• Wastewater treatment facilities to the North and West of the city will remain the most effective, efficient and cost effective means of disposing of wastewater. A philosophy of smoothing out the renewal’s “surge” will be employed. This will involve early replacement for some assets and later replacement for others.</li> </ul>	<p>In addition to general forecasting assumptions in the LTP2024-34 that apply to all of Council’s work, the following specific assumptions apply to the stormwater activity:</p> <ul style="list-style-type: none"> <li>• The typical useful lives from the New Zealand Infrastructure Asset Valuation and Depreciation Guidelines can be used to guide how long assets will last, combined with local experience.</li> <li>• Where an asset has exceeded its nominated base life, a residual life of five years is assumed. • The most efficient, equitable, safe and cost effective means of disposing of stormwater is a council-provided system for the Nelson urban area.</li> <li>• Stormwater reticulation will be designed for a storm event that has a probability of occurring on average once every 15 years (a Q15 event), and that takes into account the impacts of warming climate and more intense rainfall up to the year 2090.</li> <li>• No new legislation will be imposed during the next decade to require a higher level of service for stormwater reticulation than for the Q15 event described above.</li> <li>• A storm event with a 2% probability of occurring in any one year (a Q50 rainfall event) would very likely cause major flood damage, which would have to be managed by emergency management systems, and insurance.</li> <li>• No significant effects on stormwater structures are expected within the next 10 years from climate change-induced sea level rise (however, these effects are expected to arise in the longer term).</li> </ul>
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## Appendix A: Statement of Proposal Water Services Delivery Options for Nelson City



## **Statement of Proposal**

# **LOCAL WATER DONE WELL WATER SERVICES DELIVERY OPTIONS FOR NELSON CITY**

**December 2024**

## 1. The Proposal

As part of developing a Water Services Delivery Plan (Plan) under the Local Government (Water Services Preliminary Arrangements) Act 2024 (Act) Nelson City Council (Council) is required make a decision about how it will deliver water services to the community.

At its meeting 10 October 2024 Council confirmed its preference to remain with the existing approach for delivering water services.

The Proposal that Council wishes to seek community views on is whether:

*Nelson City Council should remain with the existing approach for delivering water services.*

## 2. Explanation of the Proposal

Council currently owns, operates and maintains the majority of the three water networks within the city. The exception is the Joint Committee with Tasman District Council that oversees the Nelson Regional Sewerage Business Unit (NRSBU) wastewater operations.

Day to day operation and maintenance of the water, stormwater and wastewater networks is carried out by various contractors - Nelmac Ltd (a Council Controlled Trading Organisation (CCTO)) who looks after water reticulation, stormwater and waste water reticulation and Fulton Hogan Ltd who looks after the water supply dam, intakes, water supply catchment and water treatment plant.

Wastewater treatment is shared between the Nelson wastewater treatment plant at the north of the city and the NRSBU treatment plant on Bell Island. Both of these plants are operated and maintained by Nelmac. The NRSBU treats wastewater from Wakatu, Tahunanui and Stoke - approximately 50% of the city. The Nelson wastewater plant treats the remainder. There are a small number of properties that have their own on-site wastewater treatment facilities.

Nelson City Council uses direct employees for the in-house financial, engineering, IT, and administration functions of the networks.

Council considers that the existing approach for delivering water services has served the city well in the past and will continue to do so into the future.

The Proposal means that the water services assets would continue to be owned by the ratepayers of the city and the governance decisions will be made by the Mayor and Councillors.

## 3. Reasons for the Proposal

Central government has embarked on a legislative programme that is expected to facilitate the development of more sustainable frameworks to own, operate and renew the country's water-based networks. These networks are predominantly in the hands of local councils across New Zealand.

The primary catalyst for the water industry reform was the contamination of the Havelock North potable water supply with campylobacter in August 2016.

The previous government established an independent water quality regulator – Taumata Arowai in 2022 and initiated its own legislative approach to water services delivery with the 'Three Waters Reform' programme. Central government elections in 2023 led to a change of government and the abandoning of that programme.

The Act is the current government's second piece of legislation in the water services area. It completed the statutory process on 2 September 2024.

The key requirement for Council in the Act is to prepare a Water Services Delivery Plan (Plan) by 3 September 2025.

The Act specifies the contents of the Plan. It must include comprehensive details of the three water-based utilities – description of assets, levels of service, regulatory compliance, financial information, the anticipated or proposed model or arrangements for delivering the water services including details of public consultation, financial sustainability and an implementation plan.

Council must consult the community on the proposed model or arrangements for delivering the water services.

This document sets out the proposal and the options that Council are required to consider under the Act.

Consultation with the community will guide Council in its deliberations and decision making.

The Act can be found on the government legislation website or through the following link:

<https://www.legislation.govt.nz/act/public/2024/0031/latest/LMS964461.html>

#### **4. Reasonably Practicable Options.**

Section 17(2)(a) of the Act requires Council to undertake consultation and section 61(2)(a) of the Act requires Council to identify at least the following two options for delivering water services:

- (i) remaining with the existing approach for delivering water services; and*
- (ii) establishing, joining, or amending (as the case may be) a Water Services Council Controlled Organisation (WSCCO) or a joint local government arrangement;*

To allow an analysis of the options identified in the Act the following breakdown of models and options within the models has been adopted:

Model a. *Remaining with the existing approach for delivering water services;*

Model b. *Establishing, joining or amending a water services council-controlled organisation (WSCCO) either;*

Option (a) Form WSCCO alone or

Option (b). Form WSCCO with other council(s).

Model c. *Establishing, joining or amending a joint local government arrangement (JA) under the Local Government Act 2002.*

Council has not identified any additional reasonably practicable options for delivering water services in its region beyond those identified in the table below.

Council's assessment of the advantages and disadvantages of the models is set out below.

<b>Model</b>		<b>Advantages</b>	<b>Disadvantages</b>
<p>Model a. Remaining with the existing approach for delivering water services.</p>		<p>Simplicity and economic efficiency.</p> <p>Structure already in place to effectively manage and deliver water services to the Nelson region.</p> <p>Nelson City utilities in good shape.</p>	<p>Borrowing capacity with the Local Government Funding Agency (LGFA) currently limited to 2.80 x income level from 1 July 2025.</p> <p>Note: The LTP 2024-34 has Council debt at 1.82 x income level at Year 10 so still some headroom for additional borrowing if required.</p>
<p>Model b. Establish, join, or amend a water services council-controlled organisation (WSCCO).</p>	<p>Option A. Form new WSCCO alone or with a non-council entity.</p>	<p>'Arms - length' operating model that could allow decision making focussed solely on water services outcomes.</p> <p>Ability of the WSCCO to access higher levels of borrowing with the LGFA – up to 5 x income level if financially supported by Council.</p>	<p>Substantial unknowns with this option given the absence of an existing WSCCO in the Nelson/Tasman region.</p> <p>No ability to join or amend existing WSCCO.</p> <p>Cost of establishing and ongoing funding for new standalone structure separate from Council – see Table A1 in section 5 below for details.</p> <p>More complex linkage to respond to Council and community priorities.</p>
	<p>Option B. Form new WSCCO with other council(s).</p>	<p>'Arms - length' operating model that could allow more autonomous decision making focussed solely on water services outcomes.</p> <p>Ability of the WSCCO to access higher levels of borrowing with the LGFA – up to 5 x income level if</p>	<p>Substantial unknowns with this option given the absence of an existing WSCCO in the Nelson/Tasman region.</p> <p>No ability to join or amend existing WSCCO.</p> <p>Cost of establishing and ongoing funding for new standalone structure separate from Council – see</p>

		<p>financially supported by Council.</p> <p>Share costs of service delivery if a joint WSCCO.</p>	<p>Table A1 in section 5 below for details.</p> <p>Possible that Nelson ratepayers will support other council(s) with lower standard utilities if a joint WSCCO, which could result in increased costs or a reduction in service levels.</p> <p>Some dilution of control over Nelson City assets with joint WSCCO.</p> <p>More complex linkage to respond to Council and community priorities.</p>
<p>Model c. Establish, join, or amend a joint local government arrangement (JA) under the Local Government Act 2002.</p>		<p>Share costs of service delivery.</p>	<p>Substantial unknowns with this option given the absence of existing joint arrangements of the required scale in the Nelson/Tasman region.</p> <p>Cost of establishing and ongoing funding for a new structure.</p> <p>Some dilution of control over Nelson City assets.</p> <p>Possible that Nelson ratepayers will support other Council(s) with lower standard utilities.</p>

## 5. Financial Impact of Proposal

Sections 64(2)(c) and (d) of the Act require Council to consider the following:

*(c) how proceeding with the proposal is likely to affect—*

*(i) the authority's rates, debt, and levels of service; and*

*(ii) any charges for water services:*

*(d) how not proceeding with the proposal is likely to affect—*

*(i) the authority's rates, debt, and levels of service; and*

*(ii) any charges for water services:*

### **Proceeding with the Proposal**

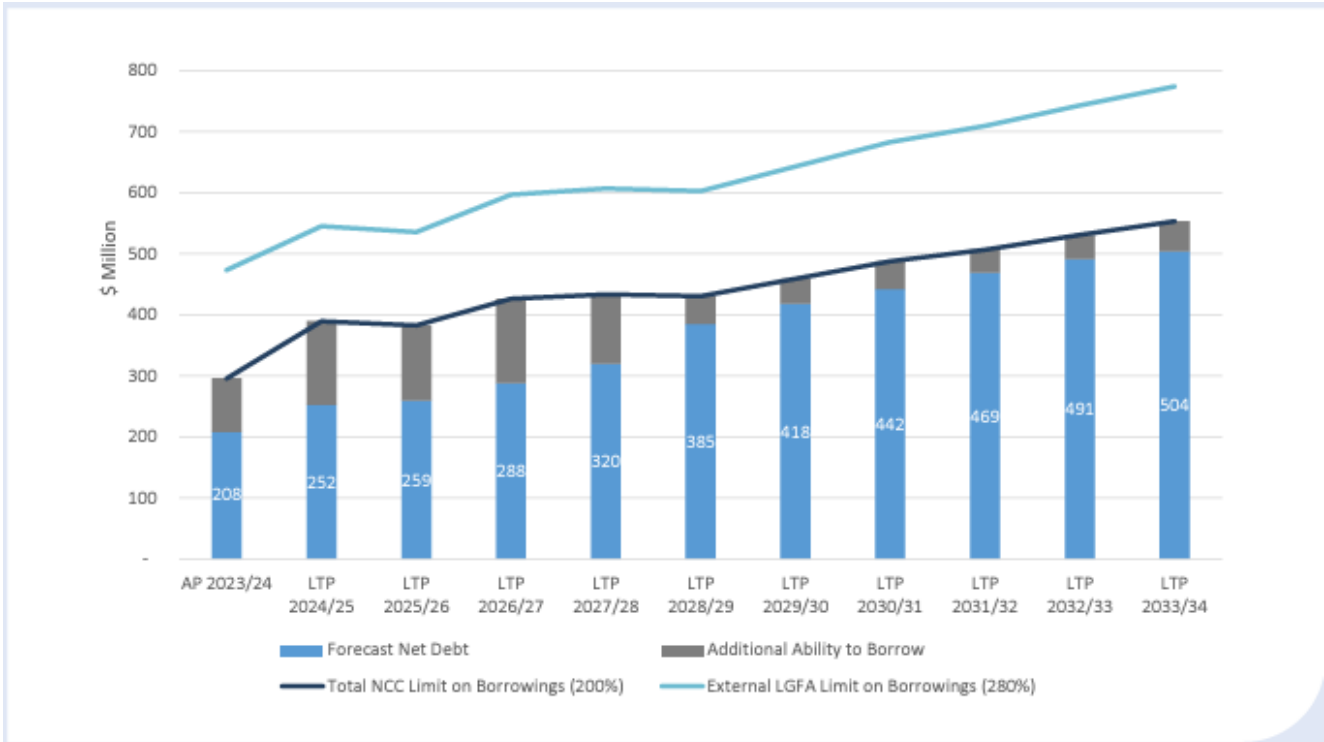
If the outcome of the consultation is to endorse the proposed Model a: *Remaining with the existing approach for delivering water services* then the effect on the Council's rates, debt, levels of service and water charges will simply be as set out in the recent Long-Term Plan 2024-34. A copy of this plan is available on the Council website or it can be accessed from the link below:

<https://www.nelson.govt.nz/council/plans-strategies-policies/long-term-plans/long-term-plan-2024-2034/>

The following sets out the rates and charges for the water supply, wastewater and stormwater activities from the LTP2024-34. Note: 2024/25 is calculated in the LTP and separately adjusted each year thereafter:

**Effect on rates** – Council rates are set out in the LTP2024-34. The rates for the three water utilities are shown in a table with water charges. See 'Effect on Water Charges' below.

**Effect on debt** – The following information – including figures and tables is taken directly from the LTP2024-34.



**Figure 5: Forecast Debt Levels by Year**

The table below shows the net debt, and debt to revenue, interest on external debt to revenue, interest on external debt to rates income over the life of this plan so that they can be compared to the limits set.

*Table 4: Net debt, net external debt, and net interest expense as a percentage of total rates income*

	Annual Plan 2023/24 \$000	LTP Year 1 2024/25 \$000	LTP Year 2 2025/26 \$000	LTP Year 3 2026/27 \$000	LTP Year 4 2027/28 \$000	LTP Year 5 2028/29 \$000	LTP Year 6 2029/30 \$000	LTP Year 7 2030/31 \$000	LTP Year 8 2031/32 \$000	LTP Year 9 2032/33 \$000	LTP Year 10 2033/34 \$000
Net debt	207,862	252,328	259,393	287,927	319,913	385,117	418,045	442,126	469,368	491,208	504,292
Net external debt not to exceed 200% of total revenue	123%	130%	136%	135%	148%	179%	182%	181%	185%	185%	182%

Net interest expense on external debt as a % of total revenue to be less than 15%	4.4%	5.8%	6.0%	5.9%	6.6%	7.7%	8.7%	9.0%	9.1%	9.2%	9.2%
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Net interest expense on external debt as a % of total rates income to be less than 20%	7.8%	10.2%	9.7%	10.1%	11.0%	12.0%	13.6%	14.1%	14.1%	14.1%	14.2%
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**Effect on Levels of Service** – No change to Levels of Service from the LTP2024-34.

**Effect on charges for water services** – No change to charges from the LTP202434. See following table.

	2024/25 rating year (\$ including GST)
Stormwater charge	\$385.79
Wastewater charge - residential, multi residential, rural, forestry and smallholding properties	\$640.09 per separately used or inhabited part of a rating unit
Wastewater charge - commercial properties	\$160.02 per separately used or inhabited part of a rating unit

<p>Trade waste            Method A</p>	<p>Conveying is \$1,176.45 per litre per minute.</p> <p>Treatment is \$1,806.07 per kg BOD per day.</p>
<p>Trade waste Method B</p>	<p>Conveying is \$1,176.45 per litre per minute.</p> <p>Treatment is \$1,806.07 per kg BOD per day.</p>
<p>Trade waste Method C</p>	<p>Combined charge is \$4.09 per m<sup>3</sup>.</p>
<p>Water rates</p> <p>Fixed annual charge</p>	<p>\$251.66 per connection</p>
<p>Water volumetric rate</p> <ul style="list-style-type: none"> <li>• Usage up to 10,000m<sup>3</sup> per year</li> <li>• Usage from 10,001 to 100,000m<sup>3</sup> per year</li> <li>• Usage over 100,000m<sup>3</sup> per year</li> <li>• Summer irrigation usage over 10,000m<sup>3</sup> per year</li> </ul>	<p>\$2.626 per m<sup>3</sup>.</p> <p>\$2.232 per m<sup>3</sup>.</p> <p>\$1.838 per m<sup>3</sup>.</p> <p>\$2.442 per m<sup>3</sup>.</p>

## **Not Proceeding with the Proposal**

If Council decides following consultation to not proceed with the proposal, then the effect on rates, debt, levels of service and charges for water services will be dependent on which alternative option is pursued. This is discussed further below.

If, following consultation, Council decides to endorse either of the alternative proposals in the Act: *establishing, joining, or amending (as the case may be) a Water Services Council Controlled Organisation (WSCCO) or a joint local government arrangement*; then Council expects there will be an adverse effect on Council's rates, debt and water charges arising from the establishment and operation of either a WSCCO or JA. This is because there will inevitably be substantial start up and ongoing operational costs involved in the establishment and operation of a new WSCCO or JA – see Tables A1 and A2 below.

The exact nature and scale of any affects will depend on what arrangement is adopted eg whether a WSCCO is established for Council alone, with a non-council entity or with other council(s).

The alternative proposals identified in the table at section 4 above are not preferred as Nelson City will bear the full cost of a WSCCO if it establishes one alone. For the JA or joint WSCCO it will likely attract approximately 50% of the costs for any organisation that is established with one other council.

While Council would not anticipate any initial change to levels of service this cannot be ruled out with a WSCCO with other councils or any JA.

High level indicative effects on rates and debt for the two options are set out below.

### **Model b. *Establish, join, or amend a water services council-controlled organisation (WSCCO).***

#### **Option A. Establish a WSCCO alone.**

Indicative cost to establish and maintain the organisation -Table A1 Additional Cost to Establish a WSCCO

<u>Local water done well costs vs status quo</u>		<u>Comment</u>
	<u>WSCCO</u> <u>Additional</u> <u>costs (\$000)</u> <u>pa</u>	
Director fees/independent members	100	Independent members would be required.
Director insurance	10	
Treasury advisor	40	
Registry fees	30	
Security trustee fees		
Additional annual report audit fees	50	
Additional planning audit fees	30	
New General manager	0	
Additional accounting / billing fees	150	
New Chief Executive	350	Assumes dedicated position.
New Chief Financial Officer	250	Assumes dedicated position
New Chief Information Officer	250	Assumes dedicated position

New Chief Engineer	150	Increased time required above current LTP2024-34
Corporate Administration costs	50	
Rent	20	
Total	1,580	

**Effect on rates** – Council operates ‘closed accounts’ for the three water utilities. These are funded by targeted rates and water charges therefore the impact on the general property rates is expected to be negligible. The cost of a WSCCO would be directly charged to the three water utilities operating accounts and recovered through water services targeted rates and charges.

**Effect on debt** – Dependent on structure. Not able to be assessed at this stage.

**Effect on Levels of Service** – Assume no change to Levels of Service from the LTP2024-34.

<b>Effect on charges for water services</b> – Charges increase to recover additional costs as set out in the table below. Future years would be adjusted to reflect any cost increases	2024/25 rating year (\$ incl GST)
Stormwater charge	\$408.76
Wastewater charge - residential, multi residential, rural, forestry and smallholding properties	\$663.54 per separately used or inhabited part of a rating unit
Wastewater charge - commercial properties	\$165.88 per separately used or inhabited part of a rating unit
Trade waste Method A	Conveying is \$1,225.21 per litre per minute.

	<i>Treatment is \$1,810.45 per kg BOD per day.</i>
Trade waste Method B	<i>Conveying is \$1,225.21 per litre per minute.</i>  <i>Treatment is \$1,810.45 per kg BOD per day.</i>

Trade waste Method C	<i>Combined charge is \$4.20 per m3.</i>
Water rates	
fixed annual charge	<i>\$259.93 per connection</i>
Water volumetric rate	
Usage up to 10,000m <sup>3</sup> per year	<i>2.712</i>
Usage from 10,001 to 100,000m <sup>3</sup> per year	<i>2.305</i>
Usage over 100,000m <sup>3</sup> per year	<i>1.898</i>
Summer irrigation usage over 10,000m <sup>3</sup> per year	<i>2.522</i>

**Option B. Form WSCCO with other council(s).** This option is dependent on the number and size of councils that would form a WSCCO. There are no existing WSCCOs, meaning it is difficult to provide any certainty about what this would involve at this stage. Given the uncertainties with this model Option A has been assessed in the detail above. It is anticipated that Council would share the costs of a WSCCO with other councils and the impact on debt, rates and water charges would therefore be difficult to assess. No further work has been done on this option for this consultation.

Indicative cost to establish and maintain – Not assessed.

**Effect on rates** – Not assessed.

**Effect on debt** - Not assessed.

**Effect on charges for water services** – Not assessed.

***Model c. Establish, join, or amend a joint local government arrangement under the Local Government Act 2002.***

There are no existing full three water services arrangements in the Nelson/Tasman region that Council could join. The closest existing arrangement is the Joint Committee of the Nelson City and Tasman District Councils that administers the Nelson Regional Sewerage Business Unit (NRSBU). The scope of this joint committee is restricted to the transmission and treatment of wastewater - from approximately 50% of Nelson City and the Tasman District townships in the Waimea Plains plus two major industrial contributors, to the treatment facility on Bell Island. All local reticulation remains the responsibility of the respective councils. The scope of any JA under the Act would be significantly wider than this current committee. As a result, Council considers a new JA would need to be established. It is anticipated that Council would share the costs of a JA with other councils and the impact on debt, rates and water charges would therefore be difficult to assess - until the number of other councils was confirmed.

The following sets out the possible costs that would be borne by two councils above the costs already met by both councils for the NRSBU.

**Cost to establish and maintain a JA with one other Council –**

Table A2 Additional Cost to Establish a JA

<u>Local water done well costs vs status quo</u>		<u>Comment</u>
	<u>JA Additional costs (\$000)pa</u>	
Director fees/independent members	30	Independent members would be required.
Director insurance	0	
Treasury advisor	0	
Registry fees	0	
Security trustee fees		
Additional annual report audit fees	10	
Additional planning audit fees	0	
New General manager	250	
Additional accounting / billing fees	50	
New CEO		
New CFO		

New CIO		
Chief Engineer	120	Increased time required above current LTP2024-34.
Corporate Administration Costs	20	
Rent	20	
Total	500	

**Effect on rates** – Council operates ‘closed accounts’ for the three water utilities. They are funded by targeted rates and water charges. Therefore the impact on the general property rates is expected to be negligible. The cost of a JA would be directly charged to the three water utilities operating accounts and recovered through water services targeted rates and charges.

**Effect on debt** – Dependent on structure. Not able to be assessed at this stage.

**Effect on Levels of Service** – Assume no change to Levels of Service from the LTP2024-34.

**Effect on charges for water services** – Charges increase to recover additional costs as set out in the table below. Future years would be adjusted to reflect any cost increases.

	2024/25 rating year (\$ incl GST)
Stormwater charge	\$393.06

Wastewater charge - residential, multi residential, rural, forestry and smallholding properties	<i>\$647.52 per separately used or inhabited part of a rating unit</i>
Wastewater charge - commercial properties	<i>\$161.88 per separately used or inhabited part of a rating unit</i>
Trade waste Method A	<i>Conveying is \$1,191.88 per litre per minute. Treatment is \$1,807.48 per kg BOD per day.</i>
Trade waste Method B	<i>Conveying is \$1,191.88 per litre per minute. Treatment is \$1,807.48 per kg BOD per day.</i>
Trade waste Method C	<i>Combined charge is \$4.13 per m<sup>3</sup>.</i>
Water rates	
fixed annual charge	<i>\$254.28 per connection</i>
Water volumetric rate	
Usage up to 10,000m <sup>3</sup> per year	2.653
Usage from 10,001 to 100,000m <sup>3</sup> per year	2.255
Usage over 100,000m <sup>3</sup> per year	1.857

Summer irrigation usage over 10,000m <sup>3</sup> per year	2.467
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### Estimated average household costs in 2051

As part of the previous government's 'Three Waters Reform' programme extensive analysis of the financial impacts of the proposal for new three waters entities was carried out by the Department of Internal Affairs (DIA).

The following table of information from the DIA sets out the expected future household costs for the options of standalone entities, joining with Marlborough District Council & Tasman District Council (Entity H) and being part of the very much larger (21 Councils) Entity C. This table is only supplied to provide a broad indication of the relative costs to households from the three options shown.

Estimated average household costs in 2051 (in 2020 prices)	Councils as standalone entities	Combined Te Tau Ihu entity (Entity H)	Original proposal (Entity C)
Marlborough	\$6,560	\$3,460	\$1,260
Nelson	\$2,330		
Tasman	\$6,760		

These figures are taken from the *water services reform archived information* on the Department of Internal Affairs website which can also be accessed from the following link <https://www.dia.govt.nz/Water-services-reform-archived-information>

For Nelson the two most economical options were joining with 20 other councils or continuing as a standalone entity. Joining with 20 other councils is not seen as a reasonably practicable option for this consultation given the feedback from the community and Council of the day when the option was mooted by the previous central government. In addition the scale of the undertaking necessary to identify which councils would be a strategic 'fit' with Nelson and the work required to provide the details required for this consultation rule this out as an option.

## **6. Other relevant implications of the proposal that the authority considers will be of interest to the public**

Council currently has established a Joint Committee with Tasman District Council to administer and operate the NRSBU. As a joint committee both councils contribute to the governance of the assets held by the NRSBU.

Should either Nelson City Council or Tasman District Council seek to alter the current service delivery arrangements for the wastewater activity undertaken by the NRSBU then both councils will be required to agree any proposal.

## **7. Scope of Council decisions following consultation**

Once Council has considered all submissions made in response to the proposal, it will make a decision. The options available to the Council will include:

- Adopting the proposal in its entirety;
- Adopting the proposal, but with modifications;
- Not adopting the proposal (in which case the Council will consider what other water service delivery option(s) are more suitable for the city).

## **8. Submissions**

Anyone may make a submission about any aspect of Council's proposal and any alternatives to it. Council, in making its decision, will take account of all submissions made.

A submission form is included at the end of this document.

All submissions, including the name and contact details of the submitter, will be made available to the public and media on Council's website, unless you specifically request that your contact details be kept private and explain why it is necessary to protect your privacy. Council will not accept any anonymous submissions.

Submissions can be made:

- online at [nelson.govt.nz](https://nelson.govt.nz)
- by post to Local Water Done Well Water Services Delivery Options Consultation, Nelson City Council, PO Box 645, Nelson 7040
- by delivering your submission to Civic House, 110 Trafalgar Street, Nelson.

Submissions must be received no later than 4:00pm 24 February 2025

Any person who wishes to speak in support of their submission will be given the opportunity to address the Council at a hearing on the afternoons of 12 and 13 March 2025.





## Appendix B: Nelson City Council Activity Management Policy 2025



Nelson City Council	Organisational policy
Contacts:	Manager Strategy
Approved by:	Senior Leadership Team
Approval date:	May 2025
Review due:	When needed

# Activity Management Policy 2025

## 1.0 Introduction

The Nelson community has, over many generations, contributed to an extensive network of assets and services. Council owns more than \$2.5 billion of assets and spends approximately \$180 million each year serving and supporting Nelsonians. Council's activities cover both the services we provide and the assets needed to deliver those services. This policy sets out how Council will undertake the activity management planning necessary to ensure this legacy of services and infrastructure is effectively managed and continues to serve our community into the future.

## 2.0 Purpose

The purpose of this policy is to set out the objectives and principles Council uses for its activity management planning and outline the responsibilities of elected members and staff. It also sets out the levels of maturity and the appropriate level of planning for each Activity Management Plan (AMP).

## 3.0 Scope

The scope of this policy covers all activities that have a large influence on the cost and quality of services Council delivers to the community and that rely heavily on assets to deliver agreed levels of service. Activity management encompasses both assets and services.

Council services and assets are grouped into 11 activities covered by this policy:

- Transport (including roading, foot/cycle paths and public transport)
- Water supply
- Wastewater
- Stormwater
- Flood protection
- Solid waste
- Environment
- Social (including libraries, arts, heritage, community partnerships and events)

- Parks and Active Recreation (including Saxton Field)
- Economic
- Corporate (including Property).

Council is proposing to adopt one Activity Management Plan with separate chapters for activity areas to reduce duplication and improve connection across areas. The front end of the AMP will include the overarching strategic information applicable to all activities, and the remaining chapters will relate to each of Council's activities and business areas managed jointly with Tasman District Council (Nelson Regional Sewerage Business Unit, Nelson Tasman Regional Landfill Business Unit and Saxton Field).

#### **4.0 Policy Statement**

Council will deliver its activities and manage its assets and services in a cost effective, affordable, sustainable, well planned and coordinated manner to provide agreed levels of service. Council will use Activity Management Plans (AMPs) as the means to fulfil its statutory obligations for compliance with the Local Government Act 2002 and its other statutory responsibilities (e.g. Resource Management Act 1991, Building Act 2004, Land Transport Management Act 2003, Health Act 1956). Council's Infrastructure Strategy identifies the significant infrastructure issues and principal options for managing these issues over a 30 year period for the transport, three waters, flood protection and solid waste activities. It provides the strategic framework within which these AMPs are developed.

#### **5.0 Objectives**

- To provide a consistent approach to activity management planning within Council and to ensure plans reflect the vision and strategic priorities of Council or the relevant joint Nelson-Tasman committee (e.g. Regional Transport Committee, Saxton Field Committee).
- To demonstrate to the community that Council recognises the critical importance of managing the city's activities, along with the associated assets, in an effective and sustainable manner in order to deliver appropriate levels of service to current and future generations in our community.
- To confirm a coordinated process for each significant activity area that links their contribution to the Community Outcomes with specific levels of service, performance measures and desired improvement priorities and strategies.
- To comply with the Non-financial Performance Measures Rules 2013 (or any replacement rules) which specify mandatory performance measures for the water supply, wastewater, stormwater, flood protection and transport activities.

#### **6.0 Principles**

Council will adhere to the following principles in its activity management planning:

- Priority will be given to maintaining and renewing existing assets that are performing well and are needed for the delivery of key services, over creating new assets.
- Whole-of-life costs and any Council prioritisation framework will be considered before initiating any major works, significant renewals of assets and the introduction of new activities
- Recognition of and consideration will be given to Kia Kotahi Te Taihu, Together Te Taihu Partnership Agreement during the preparation of AMPs and agreed areas of priority and partnership services and projects will be reflected in AMP development
- Council will be aware of the need to invest in activity management in order to continue delivering services effectively and affordably

- Council's AMPs will reflect its vision and strategic priorities, and will be appropriate for the scale of the activity and associated risks
- AMPs will provide a high level overview to our community of how the Council plans to manage its activities now and in the future
- AMPs will provide guidance and direction to staff on Council's priorities for managing its activities
- Activity management planning will be integrated with other Council planning, particularly the Long Term Plan, and financial and business planning
- Consideration will be given to what is the most useful and the minimum required data (including type, quality, frequency) needed to inform AMPs, demonstrate achievement of levels of service, and meet the requirements of any external funding agencies (e.g. NZTA/Waka Kotahi)
- Council will actively seek out long-range information to better inform and provide insights for the AMP development process, where such information is available
- Sustainability will be integrated into all aspects of AMP development, as far as resources allow
- The implications of changes in demand and the potential to manage demand will be taken into account, as far as resources allow.

## **7.0 Roles:**

Elected members and Council staff are responsible for managing Council's activities and are the custodians of Council assets on behalf of the community.

As the governing body, elected members are responsible and democratically accountable for Council decision making. In the context of AMPs, this includes:

- Setting the vision, strategic priorities and community outcomes to provide the context for activity management planning to occur
- Representing, in their role as asset owners, the best interests of our community and customers
- Ensuring the activities are planned for and assets are maintained in a manner that allows them to deliver the agreed levels of service in a cost effective manner for current and future generations
- Ensuring that activities are managed, and assets are planned, created, installed, replaced and disposed of/discontinued in accordance with Council priorities as determined by the Long Term Plan
- Approving sufficient budgets for effective delivery of Council's activities, as contained in the Long Term Plan and AMP
- Approving the AMPs.

Council staff have a responsibility to:

- Provide technical and professional advice to Councillors to enable well informed and legally robust decisions to be made with regard to activity management
- Effectively manage the agreed levels of service for activities and condition for assets
- Maintain assets and deliver activities in accordance with the guidance provided in AMPs
- Ensure practical systems are in place to collect data necessary to inform future planning and to report on levels of service and performance measures
- Prepare the AMPs for Council's approval to feed into the development of each Long Term Plan

## **8. Considerations when developing an AMP**

Prior to the development of AMPs, the Senior Leadership Team will provide guidance to AMP managers on the funding envelope they need to work within. It is important that AMP managers work within this envelope and make it clear in the AMP what the implications are of doing so.

Among other things, AMPs should include discussion on the following matters:

- a. Risk management – this should include identification of critical asset needed to deliver the key activity services and ability to deliver the work programme
- b. Resilience planning, including assessing:
  - i. the implications of climate change on the critical assets within the activity
  - ii. any implications for continuing to deliver the key services
  - iii. adaptation which may be needed over the coming 10 years and beyond
- c. The quality of the asset data used when preparing the AMP – noting that data quality is expected to be higher for assets in AMPs with higher maturity levels
- d. Demand management and the implications for the activity of population and demographic changes
- e. Any implications for the activity of external funding sources and the timing of confirmation of that funding (e.g. NZTA/Waka Kotahi, Tasman District Council)

## **9. Infrastructure Strategy and AMP development**

Council's Infrastructure Strategy identifies significant infrastructure issues for Council over the next 30 years and identifies the principal options for managing those issues and the implication of the options. The strategy outlines how the Council intends to manage its infrastructure assets, taking into account the need to:

- a. renew or replace existing assets, respond to population changes, and allow for any required changes in levels of service provided through those assets
- b. maintain or improve public health and environmental outcomes or mitigate adverse effects on them
- c. provide for the resilience of infrastructure assets by identifying and managing risks relating to natural hazards and by making appropriate financial provision for those risks.

Activity Management Plans for the relevant activities (transport, three waters, flood protection and solid waste) should be consistent with and demonstrate appropriate linkages to the strategy.

### **10.0 Approval Process**

AMPs will be reviewed and revised three yearly to correspond with the Long Term Plan cycle.

Draft AMPs should be prepared and approved to inform the Long Term Plan development at the latest by December of the year before the next Long Term Plan is adopted. The final AMPs, updated to reflect any relevant changes to the Long Term Plan, will be adopted by Council within six months of adoption of the Long Term Plan.

### 10.0 Consultation

Council will not undertake public consultation on the individual AMPs. Key information from the AMPs (e.g. priorities, key projects, levels of service)) will be available to the public in the Activity Summaries as supporting information for the Long Term Plan consultation process.

### 11.0 Level of Activity Management Maturity

The table below sets out the level of planning appropriate to each Council AMP. The activity management maturity assessment (aware, basic, core, intermediate or advanced) is aligned with the Activity Management Maturity Framework guidelines provided in the *International Infrastructure Management Manual 2020*.

AMP Name	Maturity Level
Transport AMP	Core Plus
Water Supply AMP	Core Plus
Wastewater AMP	Core Plus
Nelson Regional Sewerage Business Unit AMP	Core Plus
Stormwater AMP	Core Plus
Solid Waste AMP	Core Plus
Nelson Tasman Regional Landfill Business Unit AMP	Core Plus
Flood Protection AMP	Core Plus
Community Partnerships (including Arts, Heritage and Events) AMP	Core
Parks and Facilities AMP	Core
Environmental Management AMP	Core
Property AMP	Core
Saxton Field AMP (joint with Tasman DC)	Core
Forestry (if needed in the future)	Core

**Note:** ‘Core Plus’ means that the AMP achieves a level of maturity of no less than ‘Core’, with some elements of the AMP achieving a higher ‘Intermediate’ standard (refer IIMM 2020 manual).

### Appendix C: Long Term Plan 2024 – 2034 Budget Table (Inflated)

Account	Year0 2023/24	Year1 2024/25	Year2 2025/26	Year3 2026/27	Year4 2027/28	Year5 2028/29	Year6 2029/30	Year7 2030/31	Year8 2031/32	Year9 2032/33	Year10 2033/34
<b>Grand Total</b>	106,583	(1,520,406)	(513,765)	99,642	384,198	189,734	(15,530)	246,219	1,600,401	2,143,302	927,630
<b>Wastewater</b>	(28,211)	(519,877)	154,922	1,025,092	1,024,825	747,636	786,406	1,093,281	1,332,692	1,817,265	1,188,351
<b>6405 Wastewater</b>	(28,211)	(519,877)	154,922	1,025,092	1,024,825	747,636	786,406	1,093,281	1,332,692	1,817,265	1,188,351
<b>Income</b>	(16,865,429)	(18,111,224)	(19,266,710)	(21,305,698)	(23,113,506)	(25,741,866)	(26,579,673)	(29,443,828)	(31,204,820)	(33,908,610)	(35,046,767)
<b>Rates Income</b>	(11,985,613)	(12,508,347)	(13,301,079)	(14,850,686)	(16,205,119)	(18,294,626)	(18,990,830)	(21,295,168)	(22,564,298)	(24,938,412)	(25,717,939)
6405 Drainage Rates	(11,985,613)	(12,486,739)	(13,280,465)	(14,830,751)	(16,185,705)	(18,275,822)	(18,972,633)	(21,277,631)	(22,547,525)	(24,922,404)	(25,702,695)
6405 Rate - Emergency Response - Flooding Aug 2022	0	(21,608)	(20,614)	(19,935)	(19,414)	(18,804)	(18,197)	(17,537)	(16,773)	(16,008)	(15,244)
<b>Other Income</b>	(4,879,816)	(5,602,877)	(5,965,631)	(6,455,012)	(6,908,387)	(7,447,240)	(7,588,843)	(8,148,660)	(8,640,522)	(8,970,198)	(9,328,828)
6405 Nema Aug 22 Flood recovery	(46,606)	0	0	0	0	0	0	0	0	0	0
6405 Land Rental	(13,160)	(13,160)	(13,423)	(13,691)	(13,965)	(14,244)	(14,530)	(14,821)	(15,117)	(15,419)	(15,727)
6405 Trade Waste : Commercial C	(2,200,000)	(1,601,605)	(1,641,092)	(1,739,044)	(1,898,772)	(2,026,536)	(2,112,274)	(2,282,523)	(2,384,693)	(2,533,174)	(2,701,656)
6405 Trade Waste : Commercial A	(750,000)	(1,154,478)	(1,250,442)	(1,341,713)	(1,464,947)	(1,563,519)	(1,629,668)	(1,761,019)	(1,839,846)	(1,954,403)	(2,084,390)
6405 Trade Waste : Commercial B	0	(885,634)	(1,062,664)	(1,362,614)	(1,487,767)	(1,587,876)	(1,655,055)	(1,788,452)	(1,868,507)	(1,984,848)	(2,116,861)
6405 Sundry Income	(808)	0	0	0	0	0	0	0	0	0	0
6405 Electricity Recovery	(4,087)	0	0	0	0	0	0	0	0	0	0
6405 Insurance Aug 22 Flood Recovery	(53,155)	0	0	0	0	0	0	0	0	0	0
6405 NRSBU Investment Return	(1,812,000)	(1,948,000)	(1,998,010)	(1,997,950)	(2,042,936)	(2,255,065)	(2,177,316)	(2,301,845)	(2,532,359)	(2,482,354)	(2,410,194)
<b>Expenses</b>	20,057,346	21,399,168	22,022,826	23,222,581	25,225,126	27,002,748	27,975,129	30,186,208	33,990,433	33,437,736	35,430,357
<b>Staff Operating Expenditure</b>	1,161,260	1,239,479	1,296,077	1,310,707	1,313,709	1,335,920	1,369,282	1,387,891	1,414,282	1,451,132	1,468,762
6405 Support Services Overhead	711,952	762,176	808,505	813,307	806,284	818,304	841,264	849,302	864,934	890,814	897,282
6405 Capital Projects	37,739	39,614	41,083	41,911	42,756	43,615	44,491	45,382	46,289	47,213	48,153
6405 Mtce: Engineering Services	411,569	437,689	446,489	455,489	464,669	474,001	483,527	493,207	503,059	513,105	523,327
<b>Base Expenditure</b>	8,988,307	9,705,435	9,775,124	10,298,390	11,079,004	11,783,518	12,082,391	13,044,466	13,669,328	14,438,578	15,349,037
6405 Wastewater Reticulation Programmed Maintenance	366,000	430,000	444,570	470,475	481,320	529,201	542,990	556,657	570,596	584,364	598,454
6405 Generator programmed maintenance	12,000	20,000	20,440	20,910	21,392	21,862	22,320	22,768	23,222	23,664	24,114
6405 Data aquisition, monitoring and storage strategy	0	0	20,440	20,910	0	0	0	0	40,638	41,412	48,228
6405 After Hours Duty Officer	23,000	23,000	23,506	24,046	24,601	25,141	25,668	26,183	26,705	26,030	26,525
6405 Mtce: NN Treatment Plant	700,000	700,000	715,400	977,542	1,004,580	1,031,785	1,058,668	1,085,316	1,112,492	1,494,295	1,530,325
6405 Odour management	0	75,000	76,650	78,412	106,960	163,965	167,400	170,760	174,165	177,480	180,855
6405 Data equipment mtce	0	25,000	25,550	26,138	32,088	49,190	55,800	96,764	104,499	112,404	120,570
6405 Trade Waste Monitoring	16,000	92,000	124,684	177,735	181,832	185,827	189,720	193,528	197,387	201,144	204,969
6405 Regional Sewerage: NCC Share	6,774,506	7,637,560	7,579,998	7,673,275	8,281,916	8,849,745	9,101,508	9,904,513	10,510,640	10,875,161	11,604,782
6405 Staff Contra - Inflow & Infiltration Reduction Programme	0	0	0	0	0	0	0	0	0	(100,572)	(102,484)
6405 Telephones	2,340	0	0	0	0	0	0	0	0	0	0
6405 Electricity	282,075	282,075	288,281	294,910	301,708	308,337	314,796	321,115	327,518	333,752	340,098
6405 Rates	26,128	27,304	27,904	28,546	29,204	29,846	30,471	31,083	31,702	32,306	32,920
6405 Water by Meter	624	652	666	682	697	713	728	742	757	772	786
6405 Insurance	579,426	345,844	353,453	361,580	369,915	378,042	385,962	393,709	401,559	409,203	416,984
6405 Plant / Vehicle Operating Expense	1,000	1,000	1,022	1,046	1,070	1,093	1,116	1,138	1,161	1,183	1,206
6405 Legal Expenses	1,000	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,149	1,172	1,195
6405 Valuation Fees	10,000	10,000	5,110	10,455	5,348	10,931	5,580	11,384	5,806	11,832	6,028
6405 Wastewater Risk Management Plan	0	5,000	25,550	26,138	32,088	49,190	55,800	56,920	58,055	59,160	60,285
6405 Climate Change - Emissions Reduction Strategy	37,500	15,000	15,330	20,910	106,960	21,862	22,320	113,840	23,222	23,664	120,570

6405 WW Activity and Growth studies	0	0	0	0	32,088	38,258	44,640	56,920	58,055	59,160	60,285
6405 Climate Change - Vulnerability Assessment	52,000	5,000	15,330	52,275	0	0	0	0	0	47,328	48,228
6405 Climate Change - Adaptation Strategy	0	10,000	10,220	31,365	53,480	54,655	55,800	0	0	23,664	24,114
6405 Term Contract Support	104,708	0	0	0	0	0	0	0	0	0	0
6405 PS designations	0	0	0	0	10,696	32,793	0	0	0	0	0
<b>Unprogrammed Expenses</b>	<b>774,000</b>	<b>690,000</b>	<b>710,290</b>	<b>731,850</b>	<b>796,852</b>	<b>819,826</b>	<b>842,580</b>	<b>970,462</b>	<b>994,240</b>	<b>1,017,698</b>	<b>1,041,694</b>
6405 Wastewater Reticulation Reactive Maintenance	700,000	675,000	689,850	705,712	748,720	765,170	781,200	868,006	889,742	911,210	933,180
6405 Generator unprogrammed maintenance	20,000	0	0	0	5,348	5,466	5,580	17,076	17,416	17,748	18,086
6405 Reactive maintenance CCTV	54,000	15,000	20,440	26,138	42,784	49,190	55,800	85,380	87,082	88,740	90,428
<b>Programmed Expenses</b>	<b>457,337</b>	<b>594,000</b>	<b>714,378</b>	<b>877,174</b>	<b>1,235,388</b>	<b>1,421,030</b>	<b>1,261,080</b>	<b>1,673,448</b>	<b>3,976,768</b>	<b>1,591,404</b>	<b>1,561,382</b>
6405 Mtce: Flow Monitor	24,000	24,000	24,528	25,092	32,088	32,793	39,060	39,844	46,444	47,328	48,228
6405 Atawhai Rising Main repairs	0	0	61,320	62,730	64,176	65,586	66,960	68,304	69,666	70,992	72,342
6405 NWWTP Desludging	0	0	0	0	0	0	0	0	2,322,200	0	0
6405 Mtce: NWWTP Desludging	0	20,000	20,440	20,910	42,784	65,586	66,960	68,304	69,666	70,992	72,342
6405 Overflow Reduction Programme (Inflow & Infiltration)	234,000	195,000	209,510	224,782	235,312	218,620	223,200	398,440	406,385	414,120	482,280
6405 Mtce: CCTV Inspections	51,000	45,000	45,990	47,048	53,480	81,982	83,700	113,840	116,110	118,320	120,570
6405 Trunk main clearing	0	40,000	40,880	41,820	53,480	54,655	55,800	113,840	116,110	118,320	120,570
6405 Mtce: Ex-Filtrator	725	20,000	20,440	20,910	32,088	32,793	33,480	45,536	46,444	47,328	48,228
6405 Performance & condition assessments	51,000	20,000	20,440	20,910	48,132	54,655	61,380	73,996	75,472	82,824	84,399
6405 WW Reticulation Network Condition Assessment/Investigation	0	30,000	35,770	41,820	48,132	54,655	61,380	73,996	75,472	82,824	84,399
6405 WWW - Pump Station Data Collection, storage and use	0	20,000	20,440	20,910	32,088	32,793	33,480	56,920	58,055	59,160	60,285
6405 Wastewater Bylaw review	0	0	10,220	26,138	0	0	0	45,536	46,444	0	0
6405 Network Capacity Confirmation for Growth Areas	21,612	20,000	20,440	20,910	21,392	21,862	33,480	34,152	34,833	35,496	36,171
6405 Natural Hazards Risk Assessment	12,000	50,000	0	0	53,480	0	0	85,380	87,082	88,740	90,428
6405 NWWTP Long Term Scoping/Options	63,000	60,000	61,320	62,730	106,960	109,310	111,600	0	0	59,160	60,285
6405 Easement implementation	0	0	10,220	15,682	16,044	21,862	22,320	22,768	23,222	23,664	24,114
6405 City Centre Catchment Long Term Climate Change and Resilience	0	0	0	0	53,480	109,310	111,600	0	0	0	0
6405 Quarantine Rd PS Catchment Long Term Climate Change and Resilience	0	0	51,100	52,275	106,960	109,310	0	0	0	0	0
6405 Wakatu PS Catachment Long Term Climate Change and Resilience	0	0	0	52,275	53,480	109,310	0	0	0	0	0
6405 Saxton Rd PS Catchment Long Term Climate Change and Resilience	0	0	0	52,275	106,960	109,310	0	0	0	0	0
6405 Songer St PS Catchment Long Term Climate Change and Resilience	0	0	0	0	0	54,655	111,600	113,840	0	0	0
6405 Atawhai PS Catchments Long Term Climate Change and Resilience	0	0	0	0	0	0	55,800	113,840	116,110	0	0
6405 Glenduan WW Long Term Climate Change and Resilience	0	0	0	0	0	0	0	56,920	116,110	118,320	0
6405 wastewater asset mgmt support	0	50,000	51,100	52,275	53,480	54,655	55,800	113,840	116,110	118,320	120,570
6405 Catchment Environmental Monitoring	0	0	10,220	15,682	21,392	27,328	33,480	34,152	34,833	35,496	36,171
<b>Finance Expenses</b>	<b>212,465</b>	<b>272,946</b>	<b>289,431</b>	<b>530,868</b>	<b>909,594</b>	<b>1,254,973</b>	<b>1,678,034</b>	<b>2,093,598</b>	<b>2,560,465</b>	<b>3,134,889</b>	<b>3,767,486</b>
6405 Internal Interest	212,465	272,946	289,431	530,868	909,594	1,254,973	1,678,034	2,093,598	2,560,465	3,134,889	3,767,486
<b>Depreciation</b>	<b>8,463,977</b>	<b>8,897,308</b>	<b>9,237,526</b>	<b>9,473,592</b>	<b>9,890,579</b>	<b>10,387,481</b>	<b>10,741,762</b>	<b>11,016,343</b>	<b>11,375,350</b>	<b>11,804,035</b>	<b>12,241,996</b>
6405 Depreciation	249,019	289,192	329,607	352,429	551,134	833,087	976,585	1,046,216	1,196,105	1,421,505	1,651,182
6405 Loss of Service Potential	8,212,121	8,605,165	8,904,880	9,118,057	9,336,264	9,551,140	9,761,851	9,966,732	10,175,778	10,378,994	10,587,207
6405 Plant / Vehicle Depreciation	2,837	2,951	3,039	3,106	3,181	3,254	3,326	3,395	3,467	3,536	3,607
<b>Sources of Funds</b>	<b>(10,093,678)</b>	<b>(11,598,226)</b>	<b>(16,828,616)</b>	<b>(24,120,594)</b>	<b>(24,608,466)</b>	<b>(21,552,728)</b>	<b>(22,317,839)</b>	<b>(24,715,032)</b>	<b>(29,193,673)</b>	<b>(30,584,659)</b>	<b>(26,056,425)</b>
<b>Non Cash Income</b>	<b>(8,463,977)</b>	<b>(8,897,308)</b>	<b>(9,237,526)</b>	<b>(9,473,592)</b>	<b>(9,890,579)</b>	<b>(10,387,481)</b>	<b>(10,741,762)</b>	<b>(11,016,343)</b>	<b>(11,375,350)</b>	<b>(11,804,035)</b>	<b>(12,241,996)</b>
6405 Non cash depreciation	(8,463,977)	(8,897,308)	(9,237,526)	(9,473,592)	(9,890,579)	(10,387,481)	(10,741,762)	(11,016,343)	(11,375,350)	(11,804,035)	(12,241,996)
<b>Non Operating Income</b>	<b>(1,366,286)</b>	<b>(2,700,918)</b>	<b>(3,278,787)</b>	<b>(6,666,740)</b>	<b>(8,505,549)</b>	<b>(3,254,564)</b>	<b>(5,045,351)</b>	<b>(5,146,145)</b>	<b>(5,251,165)</b>	<b>(5,355,214)</b>	<b>(5,464,042)</b>
6405 IAF Paru Paru PS Upgrade	0	(378,115)	(224,117)	(3,544,044)	(5,316,066)	0	0	0	0	0	0
6405 Development Contributions	(703,685)	(1,133,730)	(1,839,437)	(1,878,331)	(1,916,461)	(1,953,480)	(3,717,037)	(3,789,888)	(3,867,797)	(3,944,141)	(4,026,215)
6405 Vested Infrastructural Assets	(662,601)	(1,189,073)	(1,215,233)	(1,244,365)	(1,273,022)	(1,301,084)	(1,328,314)	(1,356,257)	(1,383,368)	(1,411,073)	(1,437,827)
<b>Loan Raised</b>	<b>(263,415)</b>	<b>0</b>	<b>(4,312,303)</b>	<b>(7,980,262)</b>	<b>(6,212,338)</b>	<b>(7,910,683)</b>	<b>(6,530,726)</b>	<b>(8,552,544)</b>	<b>(12,567,158)</b>	<b>(13,425,410)</b>	<b>(8,350,387)</b>

6405 Internal Loans Raised	(123,176)	0	(4,312,303)	(7,980,262)	(6,212,338)	(7,910,683)	(6,530,726)	(8,552,544)	(10,244,958)	(13,425,410)	(8,350,387)
6405 Loan raised NNWWTP Desludging	0	0	0	0	0	0	0	0	(2,322,200)	0	0
6405 Emergency Response - Flooding Aug 2022 - Loan raised	(140,239)	0	0	0	0	0	0	0	0	0	0
<b>Uses of Funds</b>	<b>128,426</b>	<b>676,051</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>
<b>Loans Paid</b>	<b>128,426</b>	<b>676,051</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>	<b>89,447</b>
6405 Internal Loan Repaid	0	586,604	0	0	0	0	0	0	0	0	0
6405 Loan paid NNWWTP Desludging	74,776	74,776	74,776	74,776	74,776	74,776	74,776	74,776	74,776	74,776	74,776
6405 Emergency Response - Flooding Aug 2022 - Loan repaid	53,650	14,671	14,671	14,671	14,671	14,671	14,671	14,671	14,671	14,671	14,671
<b>Capital Expenditure</b>	<b>6,745,124</b>	<b>7,114,354</b>	<b>14,137,975</b>	<b>23,139,356</b>	<b>23,432,224</b>	<b>20,950,035</b>	<b>21,619,342</b>	<b>24,976,486</b>	<b>27,651,305</b>	<b>32,783,351</b>	<b>26,771,739</b>
<b>Capital Staff Cost</b>	<b>401,225</b>	<b>422,389</b>	<b>436,430</b>	<b>445,230</b>	<b>454,204</b>	<b>463,328</b>	<b>472,639</b>	<b>482,101</b>	<b>491,732</b>	<b>501,551</b>	<b>511,542</b>
6405 Capital Projects	311,676	327,157	339,283	346,125	353,102	360,195	367,434	374,790	382,277	389,910	397,677
6405 UT: Utilities	89,549	95,232	97,147	99,105	101,102	103,133	105,205	107,311	109,455	111,641	113,865
<b>Renewals</b>	<b>2,718,139</b>	<b>3,373,465</b>	<b>3,198,860</b>	<b>7,806,890</b>	<b>9,493,010</b>	<b>14,049,528</b>	<b>15,985,701</b>	<b>17,775,110</b>	<b>16,892,568</b>	<b>13,599,582</b>	<b>8,711,077</b>
6405 Data Gathering equipment	63,407	70,000	71,540	73,255	80,295	82,065	83,782	85,545	87,255	89,002	90,690
6405 Term Contract Support - Capital	70,034	0	0	0	0	0	0	0	0	0	0
6405 Wastewater model calibration	53,021	25,000	25,550	209,300	321,180	273,550	27,928	28,515	29,085	474,680	483,680
6405 Wastewater Pipe Renewals & upgrades	271,741	500,000	511,000	523,250	2,141,200	2,188,400	2,234,200	1,140,600	1,745,100	2,373,400	3,023,000
6405 Mount St and Konini St	0	50,000	0	0	0	109,420	893,680	0	0	0	0
6405 Stansell #52 and Princes Drive 274/278 Sewer renewal	58,868	0	0	0	0	0	0	0	0	0	0
6405 Manhole replacement	20,000	50,000	56,210	62,790	69,589	76,594	83,782	91,248	98,889	106,803	114,874
6405 Collingwood St Sewer renewal Manuka to Bronte	158,059	0	0	0	0	0	0	0	0	0	0
6405 Pipe Renewals - Wolfe Street	411,807	0	0	0	0	0	0	0	0	0	0
6405 Emano/Murphy St Wastewater pipe Renewal & Upgrades	0	0	0	0	0	0	0	3,421,800	3,490,200	3,560,100	3,627,600
6405 Awatea/Quarantine/Airport RM network - Renewal and Upgrade	0	0	0	0	0	0	0	0	0	0	120,920
6405 Halifax St East - WW pipe renewal	0	0	0	0	0	0	1,340,520	1,368,720	0	0	0
6405 Atawhai Rising Main renewal & upgrade - Stage 1	100,000	637,965	1,022,000	5,232,500	5,353,000	9,847,800	10,053,900	10,265,400	10,470,600	5,933,500	0
6405 Capital WW network Reactive	91,949	75,000	76,650	78,488	107,060	109,420	111,710	114,060	116,340	118,670	120,920
6405 Renewals & upgrades Swallow Rising Main Watercourse Crossing	106,105	200,000	511,000	523,250	0	0	0	0	0	0	0
6405 Renewals Pump stations	300,000	350,000	357,700	366,275	374,710	382,970	335,130	342,180	349,020	356,010	362,760
6405 Vangaurd PS	0	0	0	0	0	0	0	0	0	118,670	241,840
6405 Flow meter renewals	31,703	30,000	30,660	31,395	32,118	32,826	33,513	34,218	34,902	35,601	36,276
6405 NWWTP renewals	358,782	330,000	337,260	523,250	535,300	361,086	368,643	376,398	325,752	332,276	338,576
6405 NWWTP Wetlands Plant renewal	47,195	200,000	20,440	20,930	21,412	109,420	22,342	22,812	23,268	23,734	120,920
6405 NWWTP Resource Consent Renewal	500,000	761,500	102,200	0	0	0	0	0	0	0	0
6405 Wastewater Overflows Resource Consent renewal	0	0	0	0	0	382,970	390,985	342,180	0	0	0
6405 SCADA renewals	75,468	24,000	5,110	5,232	371,498	5,471	5,586	27,374	5,817	77,136	29,021
6405 Generator Renewal	0	70,000	71,540	156,975	85,648	87,536	0	114,060	116,340	0	0
<b>Capital Growth</b>	<b>466,623</b>	<b>1,737,500</b>	<b>9,938,541</b>	<b>14,358,754</b>	<b>11,413,399</b>	<b>1,559,235</b>	<b>1,005,390</b>	<b>5,132,700</b>	<b>6,119,484</b>	<b>12,697,690</b>	<b>14,026,720</b>
6405 Saxton Road sewer upgrade	0	0	0	0	0	0	0	0	232,680	3,560,100	3,385,760
6405 Central City Intensification Capacity Increases	0	0	0	0	0	0	0	0	0	1,305,370	1,934,720
6405 Ngawhatu Valley TM - Stage 2	0	0	0	0	0	54,710	223,420	3,421,800	3,199,350	0	0
6405 Mahitahi Development	60,000	740,000	4,088,000	2,629,854	1,070,600	1,094,200	0	0	0	0	0
6405 Bayview Development	0	0	0	0	0	0	223,420	1,368,720	1,407,714	0	0
6405 IAF Wastewater Pipeline Upgrade	135,000	467,500	4,705,901	2,239,447	1,571,587	0	0	0	0	0	0
6405 IAF Paru Paru PS Upgrade	200,000	500,000	429,240	8,390,628	8,583,857	0	0	0	0	0	0
6405 Pump Station upgrades	30,000	0	51,100	261,625	107,060	109,420	111,710	114,060	116,340	118,670	120,920
6405 NWWTP Replacement	0	0	613,200	784,875	0	0	0	0	581,700	7,120,200	7,255,200
6405 Climate Change - Emissions Reduction Strategy Implementation	41,623	30,000	51,100	52,325	0	0	0	0	581,700	593,350	604,600
6405 Climate Change - Vulnerability Assessment Implementation	0	0	0	0	80,295	218,840	223,420	0	0	0	120,920

6405 Climate Change - Adaptation Strategy Implementation	0	0	0	0	0	82,065	223,420	228,120	0	0	604,600
<b>Capital Increased LOS</b>	<b>3,159,137</b>	<b>1,581,000</b>	<b>564,144</b>	<b>528,482</b>	<b>2,071,611</b>	<b>4,877,944</b>	<b>4,155,612</b>	<b>1,586,575</b>	<b>4,147,521</b>	<b>5,984,528</b>	<b>3,522,400</b>
6405 Quarantine Rd Sewer PS/Catchment Upgrades	0	1,000,000	0	0	0	0	0	0	0	0	120,920
6405 Washington Valley Sewer Upgrade	67,173	40,000	10,220	0	0	0	0	114,060	2,326,800	2,373,400	0
6405 Natural Hazards Risk Remediation	87,360	0	0	0	107,060	218,840	558,550	114,060	232,680	593,350	241,840
6405 Overflow Reduction/I&I Capital Works	150,000	100,000	102,200	104,650	133,825	164,130	195,492	228,120	261,765	178,005	211,610
6405 LoS network problem/issues upgrade/renewal appraisal	61,772	40,000	40,880	41,860	42,824	43,768	44,684	45,624	46,536	47,468	48,368
6405 City Centre (gravity and pressure) network risk mitigation p	0	0	0	0	0	0	0	114,060	290,850	2,373,400	2,418,400
6405 LoS- Lower Waimea Road Sewer Bottleneck Alleviation	40,000	0	0	0	0	0	0	0	0	0	0
6405 Awatea Place Pump station	1,793,911	15,000	0	0	0	0	0	0	0	0	0
6405 Pump station resilience improvement programme	138,566	100,000	102,200	104,650	107,060	109,420	111,710	114,060	116,340	118,670	120,920
6405 Washington/Hastings to Paru Paru PS Capacity Improvements	0	0	0	0	535,300	1,641,300	1,675,650	0	0	0	0
6405 The Glen PS improvements	50,000	0	0	0	0	0	0	0	0	0	0
6405 Pump Station/Network Overflow Screening	0	0	0	0	642,360	765,940	670,260	570,300	581,700	0	0
6405 Flood Recovery 2022 - Wastewater Improvements	240,000	0	0	0	0	0	0	0	0	0	0
6405 Trade Waste Monitoring	300,000	0	0	0	0	0	0	0	0	0	0
6405 FM installs (LoS)	0	25,000	25,550	26,162	26,765	27,355	27,928	0	0	0	0
6405 NWWTP Minor Upgrades	109,910	100,000	109,354	111,976	114,554	120,362	122,881	125,466	139,608	142,404	145,104
6405 NWWTP Inlet Work Bypass	0	0	0	0	107,060	1,094,200	0	0	0	0	0
6405 System Performance Improvements (Overflow Reduction / I&I)	120,445	100,000	102,200	104,650	107,060	109,420	111,710	114,060	116,340	118,670	120,920
6405 SCADA Upgrade	0	61,000	71,540	34,534	40,683	36,109	78,197	46,765	34,902	39,161	94,318
6405 Storage Facility - WW spares/pipes	0	0	0	0	107,060	547,100	558,550	0	0	0	0
<b>Stormwater</b>	<b>(55,616)</b>	<b>(707,998)</b>	<b>(615,648)</b>	<b>(949,053)</b>	<b>(784,090)</b>	<b>(924,982)</b>	<b>(851,063)</b>	<b>(876,332)</b>	<b>(488,985)</b>	<b>(516,525)</b>	<b>(743,977)</b>
<b>6510 Stormwater</b>	<b>(55,616)</b>	<b>(707,998)</b>	<b>(615,648)</b>	<b>(949,053)</b>	<b>(784,090)</b>	<b>(924,982)</b>	<b>(851,063)</b>	<b>(876,332)</b>	<b>(488,985)</b>	<b>(516,525)</b>	<b>(743,977)</b>
<b>Income</b>	<b>(6,727,293)</b>	<b>(7,738,452)</b>	<b>(8,380,954)</b>	<b>(9,085,195)</b>	<b>(9,573,101)</b>	<b>(10,221,198)</b>	<b>(10,732,814)</b>	<b>(11,365,703)</b>	<b>(11,961,676)</b>	<b>(12,786,711)</b>	<b>(13,063,093)</b>
<b>Rates Income</b>	<b>(6,373,123)</b>	<b>(7,663,197)</b>	<b>(8,375,594)</b>	<b>(9,079,728)</b>	<b>(9,567,524)</b>	<b>(10,215,510)</b>	<b>(10,727,012)</b>	<b>(11,359,785)</b>	<b>(11,955,640)</b>	<b>(12,780,554)</b>	<b>(13,056,813)</b>
6510 Drainage Rates	(6,373,123)	(7,199,211)	(7,875,663)	(8,563,485)	(9,037,646)	(9,679,928)	(10,208,729)	(10,860,295)	(11,477,920)	(12,324,604)	(12,622,633)
6510 Rate - Emergency Response - Flooding Aug 2022	0	(463,986)	(499,931)	(516,243)	(529,878)	(535,582)	(518,283)	(499,490)	(477,720)	(455,950)	(434,180)
<b>Other Income</b>	<b>(354,170)</b>	<b>(75,255)</b>	<b>(5,360)</b>	<b>(5,467)</b>	<b>(5,577)</b>	<b>(5,688)</b>	<b>(5,802)</b>	<b>(5,918)</b>	<b>(6,036)</b>	<b>(6,157)</b>	<b>(6,280)</b>
6510 Nema Aug 22 Flood recovery	(349,000)	(70,000)	0	0	0	0	0	0	0	0	0
6510 Sundry Income	(5,170)	(5,255)	(5,360)	(5,467)	(5,577)	(5,688)	(5,802)	(5,918)	(6,036)	(6,157)	(6,280)
<b>Expenses</b>	<b>8,044,732</b>	<b>8,802,048</b>	<b>9,148,722</b>	<b>9,525,598</b>	<b>9,909,738</b>	<b>10,309,780</b>	<b>10,786,455</b>	<b>11,214,076</b>	<b>11,685,678</b>	<b>12,244,639</b>	<b>12,705,023</b>
<b>Staff Operating Expenditure</b>	<b>1,047,354</b>	<b>1,117,864</b>	<b>1,174,601</b>	<b>1,186,181</b>	<b>1,185,444</b>	<b>1,204,862</b>	<b>1,235,933</b>	<b>1,251,409</b>	<b>1,275,004</b>	<b>1,309,524</b>	<b>1,323,741</b>
6510 Support Services Overhead	749,293	802,152	850,911	855,965	848,573	861,224	885,389	893,848	910,300	937,537	944,344
6510 Capital Projects	91,654	96,206	99,770	101,782	103,834	105,920	108,049	110,212	112,413	114,658	116,942
6510 Mtce: Engineering Services	206,407	219,506	223,920	228,434	233,037	237,718	242,495	247,349	252,291	257,329	262,455
<b>Base Expenditure</b>	<b>586,415</b>	<b>603,825</b>	<b>601,043</b>	<b>674,993</b>	<b>791,774</b>	<b>798,805</b>	<b>810,485</b>	<b>861,501</b>	<b>882,164</b>	<b>902,510</b>	<b>923,292</b>
6510 Stormwater Reticulation Programmed Maintenance	95,000	104,000	112,420	115,005	186,110	192,386	198,648	204,912	211,320	217,709	224,260
6510 After Hours Duty Officer	23,738	24,323	24,858	25,430	26,016	26,587	27,144	27,689	28,241	28,779	29,326
6510 Stormwater Monitoring Sites	20,340	15,000	15,330	15,682	24,601	26,234	27,900	29,598	31,350	33,130	34,965
6510 Building Act Compliance: Dams	45,000	50,000	27,620	28,255	28,906	29,541	30,160	30,765	31,379	31,976	32,584
6510 Freshwater Compliance	10,290	16,215	25,550	26,138	26,740	27,328	27,900	28,460	29,028	29,580	30,142
6510 Mtce: Environmnt Monitor Strms	25,725	0	0	0	0	0	0	0	0	0	0
6510 Electricity	12,387	12,387	12,660	12,951	13,250	13,541	13,824	14,102	14,383	14,657	14,936
6510 Rates	3,331	3,481	3,558	3,640	3,723	3,805	3,885	3,963	4,042	4,119	4,197
6510 Insurance	321,516	360,436	368,366	376,836	385,522	393,993	402,247	410,320	418,502	426,468	434,578
6510 Weather Forecasting	3,096	3,000	3,066	3,136	3,393	3,468	3,541	3,612	3,684	3,754	3,826
6510 Legal Fees	5,275	4,000	4,080	4,162	4,245	4,330	4,416	4,505	4,595	4,687	4,780
6510 Valuation Fees	20,717	10,983	3,535	11,483	3,700	12,006	3,860	12,503	12,752	12,995	13,242

6510 Stormwater Catchment Management Plans	0	0	0	0	32,088	65,586	66,960	91,072	92,888	94,656	96,456
6510 Climate Change - Emissions Reduction Strategy	0	0	0	52,275	53,480	0	0	0	0	0	0
<b>Unprogrammed Expenses</b>	<b>420,000</b>	<b>244,280</b>	<b>251,997</b>	<b>260,209</b>	<b>274,065</b>	<b>282,663</b>	<b>402,850</b>	<b>413,680</b>	<b>421,929</b>	<b>429,959</b>	<b>438,136</b>
6510 Stormwater Reticulation Reactive Maintenance	350,000	229,280	236,667	244,527	252,673	260,801	380,530	390,912	398,707	406,295	414,022
6510 Reactive maintenance CCTV	30,000	15,000	15,330	15,682	21,392	21,862	22,320	22,768	23,222	23,664	24,114
6510 72 Stansell Ave slip debris removal	40,000	0	0	0	0	0	0	0	0	0	0
<b>Programmed Expenses</b>	<b>185,105</b>	<b>240,405</b>	<b>182,575</b>	<b>189,387</b>	<b>207,481</b>	<b>242,346</b>	<b>246,854</b>	<b>266,619</b>	<b>329,989</b>	<b>339,230</b>	<b>345,680</b>
6510 Mtce: Wakapuaka Land Drainage	20,000	0	0	0	0	0	0	0	0	0	0
6510 Mtce & Assessment St Vincent/Hastings Culvert	15,275	5,405	5,524	5,651	5,781	0	0	0	0	0	0
6510 Stormwater Detention Pond Maintenance	50,000	60,000	61,320	65,344	66,850	71,052	72,540	76,842	78,374	82,824	84,399
6510 Condition and Performance Assessments	20,000	20,000	20,440	20,910	34,687	35,449	36,192	36,918	37,654	38,371	39,101
6510 Natural Hazards Risk Assessment	0	0	44,191	45,207	34,687	0	0	0	0	0	0
6510 Network Capacity Confirmation for Growth Areas	10,000	10,000	10,220	10,455	17,344	17,725	18,096	18,459	18,827	19,186	19,550
6510 Central Nelson SW Strategy	14,830	105,000	0	0	0	0	0	0	0	0	0
6510 Stormwater Renewal Strategy	15,000	0	0	0	0	68,931	58,646	71,788	73,219	74,613	76,031
6510 Fresh Water Quality Assessments	25,000	25,000	25,550	26,138	32,088	32,793	44,640	45,536	46,444	47,328	48,228
6510 Secondary Flow Paths Assessment	0	0	0	0	0	0	0	0	58,055	59,160	60,285
6510 Storm and flood protect asset mgmt support	15,000	15,000	15,330	15,682	16,044	16,396	16,740	17,076	17,416	17,748	18,086
<b>Finance Expenses</b>	<b>1,100,785</b>	<b>1,612,362</b>	<b>1,708,924</b>	<b>1,807,363</b>	<b>1,841,578</b>	<b>1,955,278</b>	<b>2,055,848</b>	<b>2,114,876</b>	<b>2,140,307</b>	<b>2,288,026</b>	<b>2,389,192</b>
6510 Internal Interest	1,100,785	1,612,362	1,708,924	1,807,363	1,841,578	1,955,278	2,055,848	2,114,876	2,140,307	2,288,026	2,389,192
<b>Depreciation</b>	<b>4,705,073</b>	<b>4,983,312</b>	<b>5,229,582</b>	<b>5,407,465</b>	<b>5,609,396</b>	<b>5,825,826</b>	<b>6,034,485</b>	<b>6,305,991</b>	<b>6,636,285</b>	<b>6,975,390</b>	<b>7,284,982</b>
6510 Depreciation	74,908	117,948	186,074	239,685	317,944	412,591	501,826	657,213	869,027	1,092,957	1,284,542
6510 Loss of Service Potential	4,630,165	4,865,364	5,043,508	5,167,780	5,291,452	5,413,235	5,532,659	5,648,778	5,767,258	5,882,433	6,000,440
<b>Sources of Funds</b>	<b>(10,286,654)</b>	<b>(12,129,258)</b>	<b>(13,050,457)</b>	<b>(11,674,933)</b>	<b>(11,925,050)</b>	<b>(10,809,066)</b>	<b>(11,828,527)</b>	<b>(11,794,501)</b>	<b>(15,544,330)</b>	<b>(15,426,417)</b>	<b>(13,947,258)</b>
<b>Non Cash Income</b>	<b>(4,705,073)</b>	<b>(4,983,312)</b>	<b>(5,229,582)</b>	<b>(5,407,465)</b>	<b>(5,609,396)</b>	<b>(5,825,826)</b>	<b>(6,034,485)</b>	<b>(6,305,991)</b>	<b>(6,636,285)</b>	<b>(6,975,390)</b>	<b>(7,284,982)</b>
6510 Non cash depreciation	(4,705,073)	(4,983,312)	(5,229,582)	(5,407,465)	(5,609,396)	(5,825,826)	(6,034,485)	(6,305,991)	(6,636,285)	(6,975,390)	(7,284,982)
<b>Non Operating Income</b>	<b>(1,250,572)</b>	<b>(2,933,716)</b>	<b>(4,125,291)</b>	<b>(5,639,568)</b>	<b>(4,270,082)</b>	<b>(3,619,227)</b>	<b>(5,311,586)</b>	<b>(5,411,559)</b>	<b>(5,514,990)</b>	<b>(5,617,606)</b>	<b>(5,724,123)</b>
6510 IAF Stormwater Pipeline Upgrade	0	(301,421)	(720,574)	(2,161,723)	(720,574)	0	0	0	0	0	0
6510 Development Contributions	(388,240)	(1,008,900)	(1,745,607)	(1,778,962)	(1,811,501)	(1,842,908)	(3,498,092)	(3,559,915)	(3,626,332)	(3,691,123)	(3,761,114)
6510 Vested Infrastructural Assets	(862,332)	(1,623,395)	(1,659,110)	(1,698,883)	(1,738,007)	(1,776,319)	(1,813,494)	(1,851,644)	(1,888,658)	(1,926,483)	(1,963,009)
<b>Loan Raised</b>	<b>(4,331,009)</b>	<b>(4,212,230)</b>	<b>(3,695,584)</b>	<b>(627,900)</b>	<b>(2,045,572)</b>	<b>(1,364,013)</b>	<b>(482,456)</b>	<b>(76,951)</b>	<b>(3,393,055)</b>	<b>(2,833,421)</b>	<b>(938,153)</b>
6510 Internal Loans Raised	(3,830,009)	(2,832,230)	(2,877,984)	0	(1,403,212)	(1,364,013)	(482,456)	(76,951)	(3,393,055)	(2,833,421)	(938,153)
6510 Emergency Response - Flooding Aug 2022 - Loan raised	(501,000)	(1,380,000)	(817,600)	(627,900)	(642,360)	0	0	0	0	0	0
<b>Uses of Funds</b>	<b>98,078</b>	<b>417,852</b>	<b>417,852</b>	<b>1,956,624</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>
<b>Loans Paid</b>	<b>98,078</b>	<b>417,852</b>	<b>417,852</b>	<b>1,956,624</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>	<b>417,852</b>
6510 Internal Loan Repaid	0	0	0	1,538,772	0	0	0	0	0	0	0
6510 Emergency Response - Flooding Aug 2022 - Loan repaid	98,078	417,852	417,852	417,852	417,852	417,852	417,852	417,852	417,852	417,852	417,852
<b>Capital Expenditure</b>	<b>8,815,521</b>	<b>9,939,812</b>	<b>11,249,189</b>	<b>8,328,853</b>	<b>10,386,471</b>	<b>9,377,650</b>	<b>10,505,971</b>	<b>10,651,944</b>	<b>14,913,491</b>	<b>15,034,112</b>	<b>13,143,499</b>
<b>Capital Staff Cost</b>	<b>748,364</b>	<b>785,843</b>	<b>814,569</b>	<b>830,994</b>	<b>847,746</b>	<b>864,774</b>	<b>882,154</b>	<b>899,814</b>	<b>917,789</b>	<b>936,116</b>	<b>954,763</b>
6510 Capital Projects	725,976	762,034	790,282	806,217	822,470	838,990	855,852	872,986	890,425	908,205	926,296
6510 UT: Stormwater	22,388	23,809	24,287	24,777	25,276	25,784	26,302	26,828	27,364	27,911	28,467
<b>Renewals</b>	<b>2,880,000</b>	<b>3,530,000</b>	<b>6,980,260</b>	<b>1,287,195</b>	<b>1,311,485</b>	<b>601,810</b>	<b>821,069</b>	<b>479,052</b>	<b>523,530</b>	<b>830,690</b>	<b>846,440</b>
6510 Stormwater Renewals	65,000	50,000	102,200	104,650	160,590	164,130	279,275	285,150	290,850	593,350	604,600
6510 Haven/St Vincent Culvert renewal & upgrade	2,735,000	3,000,000	6,643,000	523,250	0	0	0	0	0	0	0
6510 Atawhai SH6 Stormwater Culverts	0	100,000	102,200	523,250	535,300	218,840	0	0	0	0	0
6510 Stormwater Pump Station Renewals & upgrades	80,000	300,000	51,100	52,325	508,535	109,420	430,084	79,842	116,340	118,670	120,920
6510 Stormwater Detention Dam Renewals	0	30,000	30,660	31,395	53,530	54,710	55,855	57,030	58,170	59,335	60,460
6510 Tide Gate Renewals	0	50,000	51,100	52,325	53,530	54,710	55,855	57,030	58,170	59,335	60,460
<b>Capital Growth</b>	<b>314,502</b>	<b>1,830,000</b>	<b>1,328,600</b>	<b>2,621,169</b>	<b>2,092,702</b>	<b>328,260</b>	<b>223,420</b>	<b>228,120</b>	<b>2,326,800</b>	<b>3,560,100</b>	<b>3,023,000</b>

6510 Network Capacity Confirmation for Growth Areas	45,000	0	0	0	0	0	0	0	0	0	0
6510 York Terrace	169,502	1,500,000	766,500	0	0	0	0	0	0	0	0
6510 Intensification AP N270 City Centre	0	0	0	0	0	218,840	111,710	114,060	1,745,100	1,780,050	1,209,200
6510 Intensification City Wide	0	0	0	0	0	109,420	111,710	114,060	581,700	1,780,050	1,813,800
6510 IAF Stormwater Pipeline Upgrade	100,000	330,000	562,100	2,621,169	2,092,702	0	0	0	0	0	0
<b>Capital Increased LOS</b>	<b>4,872,655</b>	<b>3,793,969</b>	<b>2,125,760</b>	<b>3,589,495</b>	<b>6,134,538</b>	<b>7,582,806</b>	<b>8,579,328</b>	<b>9,044,958</b>	<b>11,145,372</b>	<b>9,707,206</b>	<b>8,319,296</b>
6510 Stormwater Network Models	64,542	100,000	102,200	104,650	107,060	109,420	111,710	114,060	116,340	118,670	120,920
6510 Capital: Poynters Cres	0	0	0	0	53,530	109,420	279,275	285,150	58,170	0	0
6510 Capital: Freshwater Improvement Programme	364,195	100,000	102,200	104,650	160,590	164,130	223,420	228,120	232,680	237,340	241,840
6510 Washington Valley Stormwater Upgrade	85,822	14,174	102,200	104,650	1,177,660	109,420	0	0	2,326,800	1,186,700	60,460
6510 Main Road Stoke / Arapiki / Maitland Stormwater Upgrade	0	0	0	0	0	0	223,420	228,120	232,680	830,690	1,813,800
6510 Capital: Milton: Grove-Cambria	0	0	0	0	0	0	111,710	114,060	814,380	949,360	60,460
6510 Capital: Mount St / Konini St	0	0	51,100	104,650	1,177,660	1,094,200	111,710	0	0	0	0
6510 Airlie St	100,000	342,223	0	0	0	0	0	0	0	0	0
6510 Tahunanui Hills Stormwater Catchment 9 - Moana Ave to Rocks Rd	90,000	150,000	511,000	2,093,000	2,141,200	2,188,400	1,675,650	57,030	0	0	0
6510 Tahunanui Hills Stormwater Catchment 4 - Bisley Ave	614,898	0	0	0	0	0	0	0	0	0	0
6510 Anglia/Scotia	0	0	0	0	0	0	0	0	0	0	120,920
6510 Brooklands	10,000	0	0	0	53,530	109,420	558,550	1,140,600	581,700	118,670	0
6510 Cawthron Crescent	265,809	0	0	0	0	109,420	167,565	1,939,020	58,170	0	0
6510 Kowhai	0	0	0	0	0	0	111,710	171,090	1,628,760	178,005	0
6510 Rutherford Stage 1 - Stormwater Upgrade	48,962	0	0	0	0	0	0	0	0	0	0
6510 Rutherford Stage 2 - Box Culvert Examiner to Hardy	0	0	0	0	0	0	0	0	0	0	241,840
6510 Central Nelson SW Strategy Implementation	0	0	0	0	0	218,840	223,420	228,120	581,700	949,360	967,360
6510 Tahunanui Hills Stormwater Catchment 3 - Days Track	1,200,000	0	0	0	0	0	0	0	0	0	0
6510 Tahunanui SW Strategy Implementation	0	0	0	0	107,060	109,420	279,275	114,060	581,700	1,186,700	1,209,200
6510 Totara/Hutcheson	0	0	0	0	107,060	109,420	1,117,100	570,300	58,170	0	0
6510 Natural Hazards Risk Remediation	0	0	0	0	0	0	0	57,030	232,680	237,340	241,840
6510 Toi Toi St Upgrade	0	0	0	104,650	53,530	547,100	55,855	0	0	0	0
6510 Minor Stormwater Improvements Programme	218,223	100,000	102,200	104,650	107,060	109,420	111,710	114,060	116,340	118,670	120,920
6510 Strawbridge Sq Stormwater improvements	40,000	531,572	102,200	0	0	0	0	0	0	0	0
6510 Vanguard Street LOS	389,289	0	0	0	0	0	0	114,060	116,340	118,670	1,209,200
6510 Murphy / Emano Street upgrade	120,000	100,000	102,200	104,650	107,060	2,188,400	2,234,200	2,281,200	2,326,800	2,373,400	120,920
6510 The Wood Stormwater Upgrade	0	0	0	0	0	0	0	0	116,340	237,340	181,380
6510 Tahunanui Hills Stormwater Catchment 2 - Moncrieff Avenue	30,000	412,000	0	0	0	0	0	0	0	0	0
6510 Stormwater Network Extensions	0	0	0	0	0	0	167,565	570,300	581,700	593,350	604,600
6510 Flood Recovery Minor Stormwater Improvements	400,000	300,000	306,600	313,950	321,180	0	0	0	0	0	0
6510 Private Drains/Sub	51,500	50,000	51,100	52,325	53,530	54,710	55,855	57,030	58,170	59,335	60,460
6510 Pvt/Public Drains	95,820	80,000	81,760	83,720	85,648	87,536	89,368	91,248	93,072	94,936	96,736
6510 Annesbrook Drive Storm Water	0	0	0	0	0	0	0	0	116,340	118,670	846,440
6510 Wastney Terrace stormwater (pvt drain prgm)	109,000	0	0	0	0	54,710	558,550	0	0	0	0
6510 Bisley Avenue	100,000	364,000	0	0	0	0	0	0	0	0	0
6510 Tahunanui Hills - Maire Stream Stage 2	0	0	0	0	0	109,420	111,710	570,300	116,340	0	0
6510 Flood Recovery Intakes Resilience	100,000	200,000	306,600	313,950	321,180	0	0	0	0	0	0
6510 Flood Recovery 2022 Intakes Resilience Cleveland Terrace	150,000	750,000	0	0	0	0	0	0	0	0	0
6510 Flood Recovery 2022 Intakes Resilience Devenish Place	200,000	200,000	204,400	0	0	0	0	0	0	0	0
6510 Koura Road Detention Dam LOS	24,595	0	0	0	0	0	0	0	0	0	0
<b>Water Supply</b>	<b>(696,949)</b>	<b>(634,731)</b>	<b>(585,041)</b>	<b>(444,227)</b>	<b>(281,610)</b>	<b>(138,489)</b>	<b>(616,156)</b>	<b>(704,805)</b>	<b>145,224</b>	<b>284,062</b>	<b>(226,098)</b>
<b>7005 Water Supply</b>	<b>(696,949)</b>	<b>(634,731)</b>	<b>(585,041)</b>	<b>(444,227)</b>	<b>(281,610)</b>	<b>(138,489)</b>	<b>(616,156)</b>	<b>(704,805)</b>	<b>145,224</b>	<b>284,062</b>	<b>(226,098)</b>
<b>Income</b>	<b>(15,221,270)</b>	<b>(16,249,250)</b>	<b>(17,308,984)</b>	<b>(18,707,971)</b>	<b>(19,437,821)</b>	<b>(20,997,803)</b>	<b>(21,812,188)</b>	<b>(23,019,690)</b>	<b>(23,975,271)</b>	<b>(26,093,539)</b>	<b>(26,579,370)</b>

<b>Rates Income</b>	<b>(4,346,657)</b>	<b>(4,974,064)</b>	<b>(5,298,870)</b>	<b>(5,725,885)</b>	<b>(5,955,496)</b>	<b>(6,426,476)</b>	<b>(6,665,710)</b>	<b>(7,022,466)</b>	<b>(7,302,828)</b>	<b>(7,931,989)</b>	<b>(8,074,339)</b>
7005 Annual Supply Charge	(4,346,657)	(4,807,647)	(5,122,124)	(5,538,183)	(5,752,059)	(6,218,254)	(6,464,214)	(6,828,276)	(7,117,102)	(7,754,726)	(7,905,540)
7005 Rate - Emergency Response - Flooding Aug 2022	0	(166,417)	(176,746)	(187,702)	(203,437)	(208,222)	(201,496)	(194,190)	(185,726)	(177,263)	(168,799)
<b>Other Income</b>	<b>(10,874,613)</b>	<b>(11,275,186)</b>	<b>(12,010,114)</b>	<b>(12,982,086)</b>	<b>(13,482,325)</b>	<b>(14,571,327)</b>	<b>(15,146,478)</b>	<b>(15,997,224)</b>	<b>(16,672,443)</b>	<b>(18,161,550)</b>	<b>(18,505,031)</b>
7005 Nema Aug 22 Flood recovery	(20,000)	0	0	0	0	0	0	0	0	0	0
7005 Rental: Caretakers Cottages	(14,665)	(15,398)	(15,706)	(16,020)	(16,341)	(16,667)	(17,001)	(17,342)	(17,688)	(18,042)	(11,092)
7005 Recoveries: Water Connection Application Fees	(8,576)	(9,005)	(9,185)	(9,369)	(9,556)	(9,747)	(9,942)	(10,141)	(10,344)	(10,551)	(3,768)
7005 Recoveries: Reading Charges	(31,372)	(32,941)	(33,599)	(34,271)	(34,957)	(35,655)	(36,370)	(37,098)	(37,839)	(38,597)	(38,109)
7005 Recoveries: WTP	0	0	0	0	0	0	0	0	0	0	(5,802)
7005 Water By Meter: Commercial	(4,200,000)	(4,086,500)	(4,353,806)	(4,707,455)	(4,889,250)	(5,285,515)	(5,494,582)	(5,804,034)	(6,049,537)	(6,591,517)	(6,719,709)
7005 Water by Meter: Residential	(6,600,000)	(7,131,342)	(7,597,818)	(8,214,971)	(8,532,221)	(9,223,743)	(9,588,583)	(10,128,609)	(10,557,035)	(11,502,843)	(11,726,551)
<b>Expenses</b>	<b>17,268,892</b>	<b>18,437,640</b>	<b>19,121,880</b>	<b>19,961,510</b>	<b>20,750,336</b>	<b>21,740,523</b>	<b>22,574,372</b>	<b>23,330,307</b>	<b>24,058,046</b>	<b>25,556,580</b>	<b>26,552,999</b>
<b>Staff Operating Expenditure</b>	<b>1,313,390</b>	<b>1,401,713</b>	<b>1,462,959</b>	<b>1,480,352</b>	<b>1,485,543</b>	<b>1,510,987</b>	<b>1,548,210</b>	<b>1,569,938</b>	<b>1,599,896</b>	<b>1,640,903</b>	<b>1,661,722</b>
7005 Support Services Overhead	749,293	802,152	850,911	855,965	848,573	861,224	885,389	893,848	910,300	937,537	944,344
7005 Capital Projects	24,263	25,468	26,412	26,945	27,488	28,040	28,604	29,176	29,759	30,353	30,958
7005 Mtce: Engineering Services	539,834	574,093	585,636	597,442	609,482	621,723	634,217	646,914	659,837	673,013	686,420
<b>Base Expenditure</b>	<b>4,412,040</b>	<b>4,793,757</b>	<b>4,917,596</b>	<b>5,130,808</b>	<b>5,269,294</b>	<b>5,460,573</b>	<b>5,539,192</b>	<b>5,681,171</b>	<b>5,851,288</b>	<b>6,296,390</b>	<b>6,524,590</b>
7005 Water Reticulation Programmed Maintenance	340,000	354,215	362,008	387,880	396,822	406,633	417,384	428,038	438,896	449,616	460,577
7005 Maitai Dam Aeration	0	75,000	76,650	78,412	80,220	131,172	83,700	85,380	87,082	88,740	144,684
7005 After Hours Duty Officer	27,000	30,000	30,660	31,365	33,692	34,433	36,270	36,998	37,736	40,229	40,994
7005 Mtce: Water Treatment	1,706,000	1,851,000	1,891,722	1,960,312	2,005,500	2,058,307	2,111,472	2,164,098	2,264,145	2,366,400	2,465,656
7005 Fluoridation opex	0	110,000	112,420	116,050	118,726	122,427	124,992	128,639	131,204	134,885	137,450
7005 Mtce: Headworks	530,000	500,000	531,440	575,025	603,737	619,241	632,214	647,180	660,085	711,103	724,626
7005 Water Metering	119,000	119,000	122,640	125,460	129,422	132,265	136,152	140,023	142,815	146,717	149,507
7005 Telephones	2,000	2,000	2,044	2,091	2,139	2,186	2,232	2,277	2,322	2,366	2,411
7005 Electricity	589,595	589,595	602,566	616,422	630,631	644,487	657,988	671,195	684,579	697,609	710,875
7005 Rates	36,969	38,633	39,483	40,391	41,322	42,230	43,114	43,980	44,857	45,710	46,580
7005 Water Purchased TDC	358,000	375,000	383,250	411,927	426,770	441,612	456,444	471,298	486,501	501,677	517,245
7005 Insurance	597,226	654,314	668,709	684,085	699,854	715,231	730,214	744,871	759,724	774,184	788,906
7005 Civil Contractor Sponsorship	5,000	0	5,100	0	5,306	0	5,520	0	5,744	0	5,976
7005 Advertising	3,000	3,000	3,066	3,136	3,209	3,279	3,348	3,415	3,483	3,550	3,617
7005 Plant / Vehicle Operating Expense	1,000	1,000	1,022	1,046	1,070	1,093	1,116	1,138	1,161	1,183	1,206
7005 Legal Fees	6,500	5,000	5,100	5,202	5,306	5,412	5,520	5,631	5,744	5,858	5,976
7005 Valuation Fees	18,500	10,000	2,044	10,455	2,139	15,303	2,232	15,938	2,322	16,565	2,411
7005 Water Headworks Renewals and Upgrade Strategy	0	0	0	0	0	0	0	0	0	35,496	36,171
7005 Water Treatment Plant Renewals and Upgrade Strategy	0	0	0	0	0	0	0	0	0	35,496	36,171
7005 Climate Change Vulnerability Assessment	26,000	0	0	0	0	0	0	0	0	0	0
7005 Maitai Original Raw Water Pipeline Renewal Strategy	0	0	0	0	0	0	0	0	0	35,496	36,171
7005 Water Pipeline Renewals and Upgrade Strategy	0	0	0	0	0	0	0	0	0	35,496	36,171
7005 Water Growth and Intensification Strategy	0	0	0	0	0	0	0	0	0	35,496	36,171
7005 Reticulation Water Quality Improvement and pressure management	0	0	0	0	0	0	0	0	0	35,496	36,171
7005 Water Quality Initiatives	46,250	44,000	44,968	48,093	49,202	50,283	53,568	54,643	55,733	59,160	60,285
7005 Other Professional Advice	0	32,000	32,704	33,456	34,227	34,979	35,712	36,429	37,155	37,862	38,582
<b>Unprogrammed Expenses</b>	<b>2,454,824</b>	<b>2,400,000</b>	<b>2,565,220</b>	<b>2,740,736</b>	<b>2,793,218</b>	<b>3,016,956</b>	<b>3,080,160</b>	<b>3,255,824</b>	<b>3,320,746</b>	<b>3,533,035</b>	<b>3,600,220</b>
7005 Water Reticulation Reactive Maintenance	2,450,000	2,400,000	2,555,000	2,730,281	2,793,218	3,016,956	3,080,160	3,255,824	3,320,746	3,521,203	3,588,163
7005 Insurance Claims	4,824	0	0	0	0	0	0	0	0	0	0
7005 Water Supply Bylaw	0	0	10,220	10,455	0	0	0	0	0	11,832	12,057
<b>Programmed Expenses</b>	<b>220,250</b>	<b>303,500</b>	<b>310,177</b>	<b>363,835</b>	<b>429,979</b>	<b>384,771</b>	<b>420,732</b>	<b>388,194</b>	<b>407,546</b>	<b>507,594</b>	<b>517,247</b>
7005 Mtce: Pressure/Flowrate Monitoring	43,000	35,000	35,770	36,592	53,480	54,655	55,800	60,335	61,538	65,076	66,314

7005 Mtce: Backflow Prevention	82,000	80,000	81,760	83,640	96,264	98,379	103,788	105,871	107,982	112,404	114,542
7005 WTP Lagoon desludge	0	0	0	0	0	0	0	0	0	53,244	54,256
7005 Fish passage up Maitai dam spillway	16,800	17,000	17,374	17,774	20,322	20,769	21,204	28,460	29,028	33,130	33,760
7005 Network model updates and calibration	0	0	0	52,275	106,960	0	0	0	0	35,496	36,171
7005 Maitai Dam Flood Performance	0	40,000	40,880	20,910	0	0	0	0	0	0	0
7005 Seismic Protection Review Water Assets	0	0	0	0	0	54,655	55,800	56,920	58,055	23,664	24,114
7005 Water loss reduction programme	39,750	52,000	53,144	54,366	62,037	63,400	66,960	68,304	69,666	74,542	75,959
7005 Natural Hazards Risk Assessment	0	0	0	0	0	0	0	0	0	35,496	36,171
7005 WWW - Lindavia Testing Maitai Dam	0	0	0	0	0	0	50,220	0	0	0	0
7005 Roding Pipeline	0	25,000	25,550	26,138	26,740	27,328	0	0	0	0	0
7005 Network Capacity Confirmation for Growth Areas	27,700	28,000	28,616	30,320	32,088	32,793	33,480	34,152	34,833	35,496	36,171
7005 Water Safety Plan (old PHRMP)	11,000	11,500	11,753	26,138	16,044	16,396	16,740	17,076	29,028	21,298	21,703
7005 water supply asset mgmt support	0	15,000	15,330	15,682	16,044	16,396	16,740	17,076	17,416	17,748	18,086
<b>Finance Expenses</b>	<b>1,222,533</b>	<b>1,541,360</b>	<b>1,551,567</b>	<b>1,657,307</b>	<b>1,867,869</b>	<b>2,115,867</b>	<b>2,382,437</b>	<b>2,433,937</b>	<b>2,457,164</b>	<b>2,772,324</b>	<b>3,054,085</b>
7005 Internal Interest	1,222,533	1,541,360	1,551,567	1,657,307	1,867,869	2,115,867	2,382,437	2,433,937	2,457,164	2,772,324	3,054,085
<b>Depreciation</b>	<b>7,645,855</b>	<b>7,997,310</b>	<b>8,314,361</b>	<b>8,588,472</b>	<b>8,904,433</b>	<b>9,251,369</b>	<b>9,603,641</b>	<b>10,001,243</b>	<b>10,421,406</b>	<b>10,806,334</b>	<b>11,195,135</b>
7005 Depreciation	17,617	56,436	130,427	222,259	338,006	487,784	646,719	856,334	1,084,689	1,283,157	1,480,914
7005 Loss of Service Potential	6,254,289	6,511,968	6,712,160	6,862,014	7,026,231	7,187,941	7,346,517	7,500,705	7,658,027	7,810,962	7,967,658
7005 WTP Depreciation	1,373,949	1,428,906	1,471,774	1,504,199	1,540,196	1,575,644	1,610,405	1,644,204	1,678,690	1,712,215	1,746,563
<b>Sources of Funds</b>	<b>(10,676,469)</b>	<b>(12,856,882)</b>	<b>(13,285,564)</b>	<b>(14,386,155)</b>	<b>(16,295,595)</b>	<b>(17,392,984)</b>	<b>(13,481,695)</b>	<b>(13,824,057)</b>	<b>(20,398,909)</b>	<b>(21,403,121)</b>	<b>(17,684,739)</b>
<b>Non Cash Income</b>	<b>(7,645,855)</b>	<b>(7,997,310)</b>	<b>(8,314,361)</b>	<b>(8,588,472)</b>	<b>(8,904,433)</b>	<b>(9,251,369)</b>	<b>(9,603,641)</b>	<b>(10,001,243)</b>	<b>(10,421,406)</b>	<b>(10,806,334)</b>	<b>(11,195,135)</b>
7005 Non cash depreciation	(7,645,855)	(7,997,310)	(8,314,361)	(8,588,472)	(8,904,433)	(9,251,369)	(9,603,641)	(10,001,243)	(10,421,406)	(10,806,334)	(11,195,135)
<b>Non Operating Income</b>	<b>(3,655,454)</b>	<b>(3,072,978)</b>	<b>(2,758,997)</b>	<b>(2,649,308)</b>	<b>(3,385,606)</b>	<b>(2,765,309)</b>	<b>(3,746,102)</b>	<b>(3,822,814)</b>	<b>(3,901,143)</b>	<b>(3,979,443)</b>	<b>(4,059,561)</b>
7005 WTP Fluoride Dosing	(820,594)	0	0	0	0	0	0	0	0	0	0
7005 IAF Grant Watermain Upgrade	0	(878,957)	(169,403)	0	(677,613)	0	0	0	0	0	0
7005 Insurance Aug 22 Flood Recovery	(1,000,000)	0	0	0	0	0	0	0	0	0	0
7005 Development Contributions	(454,705)	(617,310)	(978,196)	(999,280)	(1,019,967)	(1,040,072)	(1,984,758)	(2,024,418)	(2,066,798)	(2,108,360)	(2,153,002)
7005 Vested Infrastructural Assets	(1,380,155)	(1,576,711)	(1,611,398)	(1,650,028)	(1,688,026)	(1,725,237)	(1,761,344)	(1,798,396)	(1,834,345)	(1,871,083)	(1,906,559)
<b>Loan Raised</b>	<b>624,840</b>	<b>(1,786,594)</b>	<b>(2,212,206)</b>	<b>(3,148,375)</b>	<b>(4,005,556)</b>	<b>(5,376,306)</b>	<b>(131,952)</b>	<b>0</b>	<b>(6,076,360)</b>	<b>(6,617,344)</b>	<b>(2,430,043)</b>
7005 Internal Loans Raised	0	(1,386,594)	(1,854,506)	(2,625,125)	(3,684,376)	(5,376,306)	(131,952)	0	(6,076,360)	(6,617,344)	(2,430,043)
7005 Emergency Response - Flooding Aug 2022 - Loan raised	624,840	(400,000)	(357,700)	(523,250)	(321,180)	0	0	0	0	0	0
<b>Uses of Funds</b>	<b>790,253</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>1,501,891</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>
<b>Loans Paid</b>	<b>790,253</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>	<b>1,501,891</b>	<b>287,451</b>	<b>287,451</b>	<b>287,451</b>
7005 Internal Loan Repaid	607,345	0	0	0	0	0	0	1,214,440	0	0	0
7005 Waimea Dam loan repaid	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000
7005 Emergency Response - Flooding Aug 2022 - Loan repaid	57,908	162,451	162,451	162,451	162,451	162,451	162,451	162,451	162,451	162,451	162,451
<b>Capital Expenditure</b>	<b>7,141,645</b>	<b>9,746,310</b>	<b>10,600,176</b>	<b>12,400,938</b>	<b>14,414,019</b>	<b>16,224,324</b>	<b>11,815,904</b>	<b>11,306,744</b>	<b>20,173,907</b>	<b>21,936,691</b>	<b>17,197,561</b>
<b>Capital Staff Cost</b>	<b>309,586</b>	<b>326,506</b>	<b>336,588</b>	<b>343,375</b>	<b>350,296</b>	<b>357,331</b>	<b>364,513</b>	<b>371,811</b>	<b>379,239</b>	<b>386,811</b>	<b>394,516</b>
7005 Capital Projects	197,649	207,466	215,154	219,493	223,918	228,415	233,006	237,671	242,419	247,259	252,184
7005 UT: Utilities	111,937	119,040	121,434	123,882	126,378	128,916	131,507	134,140	136,820	139,552	142,332
<b>Renewals</b>	<b>2,169,135</b>	<b>1,391,000</b>	<b>1,965,817</b>	<b>1,128,125</b>	<b>1,554,511</b>	<b>5,117,573</b>	<b>3,699,836</b>	<b>3,735,465</b>	<b>10,714,914</b>	<b>13,599,583</b>	<b>7,029,080</b>
7005 Water Treatment Plant Renewals	166,561	165,000	127,750	261,625	256,944	361,086	390,985	273,744	232,680	237,340	241,840
7005 Scada Renewal	4,500	25,000	10,220	5,232	267,650	5,471	5,586	57,030	5,817	77,136	27,812
7005 Renewals: Headworks	50,000	50,000	22,995	23,546	74,942	125,833	139,638	68,436	69,804	356,010	24,184
7005 Maitai Dam renewals	0	0	0	0	0	109,420	111,710	114,060	0	0	0
7005 Roding Dam renewals	0	0	0	0	0	109,420	111,710	114,060	0	0	181,380
7005 Maitai Raw water pipeline renewal & upgrade	0	0	0	0	107,060	109,420	111,710	114,060	581,700	1,186,700	3,023,000
7005 Renewals & Upgrades: Water Pipes	264,042	285,000	1,313,270	298,252	305,121	2,171,987	2,217,444	2,264,091	2,850,330	2,907,415	2,962,540
7005 Washington Valley Water Renewal & upgrade	0	50,000	0	0	0	0	0	114,060	2,908,500	2,966,750	0

7005 Roding Pipeline	0	0	0	0	0	125,833	240,176	0	0	0	0
7005 Konini Street water renewal	0	0	51,100	0	53,530	875,360	0	0	0	0	0
7005 Nayland Rd - Aldinga to Songer	1,120,000	200,000	0	0	0	0	0	0	0	0	0
7005 Bolt Road Watermain Renewal- Stage 3	344,032	0	0	0	0	0	0	0	0	0	0
7005 Renewals: Misc Pipes & Fittings	10,000	10,000	20,440	20,930	26,765	27,355	27,928	28,515	29,085	29,668	30,230
7005 Pump Stations - Renewals	30,000	65,000	68,474	71,685	53,530	164,130	55,855	171,090	58,170	178,005	60,460
7005 Renewals: Commercial Meters	150,000	150,000	153,300	179,998	184,143	210,086	214,483	228,120	232,680	237,340	266,024
7005 Residential Meters renewals	0	0	0	0	53,530	547,100	0	0	0	0	120,920
7005 Water Meter Replacement	5,000	5,000	5,110	5,232	10,706	10,942	16,756	17,109	23,268	23,734	30,230
7005 Renewal: Membranes WTP	0	0	0	0	0	0	0	114,060	3,490,200	5,340,150	0
7005 Reservoir Refurbishment Programme	25,000	136,000	90,958	52,325	53,530	164,130	55,855	57,030	232,680	59,335	60,460
7005 Thompson Terrace Reservoir Refurbishment - Electrical/Bldg/V	0	250,000	102,200	209,300	107,060	0	0	0	0	0	0
<b>Capital Growth</b>	<b>1,011,924</b>	<b>3,377,250</b>	<b>4,722,815</b>	<b>6,045,945</b>	<b>5,309,962</b>	<b>4,152,489</b>	<b>2,854,190</b>	<b>2,597,146</b>	<b>4,310,397</b>	<b>3,957,645</b>	<b>5,773,930</b>
7005 NCC - TDC Link	0	0	0	0	0	109,420	111,710	114,060	1,745,100	1,780,050	0
7005 Suffolk Road (Saxton to Ngawhatu) water upgrade	0	0	0	0	0	0	0	0	58,170	118,670	120,920
7005 Maitahi Development Growth project	50,000	270,000	102,200	680,225	2,141,200	2,243,110	167,565	171,090	174,510	0	0
7005 Bayview Development Growth project	105,678	50,000	153,300	994,175	107,060	547,100	558,550	0	0	0	0
7005 Future growth and Intensification Projects	0	150,000	51,100	1,046,500	107,060	196,956	167,565	182,496	610,785	741,688	4,957,720
7005 IAF Bridge St	100,000	385,000	1,686,300	2,783,481	2,258,752	0	0	0	0	0	0
7005 IAF Collingwood St	60,000	859,100	0	0	0	0	0	0	0	0	0
7005 IAF Halifax St	125,000	1,226,150	1,253,483	0	0	0	0	0	0	0	0
7005 IAF Rutherford St	80,000	22,000	929,151	0	0	0	0	0	0	0	0
7005 PRV renewal Valves SCADA Electrical	0	50,000	51,100	52,325	58,883	60,181	61,440	68,436	69,804	71,202	78,598
7005 water pump stations - upgrades	86,246	70,000	56,721	131,336	64,236	65,652	189,907	68,436	69,804	237,340	72,552
7005 Water Treatment Plant Upgrades	230,000	245,000	388,360	253,253	331,886	355,615	178,736	433,428	511,896	213,606	459,496
7005 Capital: Atawhai Res & pump Ma	175,000	0	0	0	0	218,840	111,710	0	872,550	712,020	0
7005 Ngawhatu Valley high level reservoir	0	0	0	104,650	165,943	169,601	1,117,100	1,365,298	0	0	0
7005 Climate Change Adaptation Projects	0	0	0	0	74,942	76,594	78,197	79,842	81,438	83,069	84,644
7005 Water model upgrade	0	50,000	51,100	0	0	109,420	111,710	114,060	116,340	0	0
<b>Capital Increased LOS</b>	<b>3,651,000</b>	<b>4,651,554</b>	<b>3,574,956</b>	<b>4,883,493</b>	<b>7,199,250</b>	<b>6,596,931</b>	<b>4,897,365</b>	<b>4,602,322</b>	<b>4,769,357</b>	<b>3,992,652</b>	<b>4,000,035</b>
7005 Headworks Upgrades	401,576	215,000	255,500	144,417	117,766	382,970	240,176	364,992	430,458	557,749	604,600
7005 Toi Toi St water ridermain	0	0	0	0	0	0	0	0	58,170	118,670	362,760
7005 Capital: Pressure Reduction	53,985	0	0	62,790	64,236	65,652	0	68,436	0	0	24,184
7005 Capital: Ridermains	68,691	70,000	73,584	77,441	42,824	80,971	84,900	86,686	88,418	92,563	94,318
7005 System Improvements	65,000	68,000	69,496	74,302	76,013	77,688	81,548	83,264	84,928	89,002	90,690
7005 Capital: Backflow Prevention	220,000	100,000	102,200	104,650	107,060	268,079	284,860	290,853	296,667	314,476	320,438
7005 Capital: Atawhai Trunkmain	101,500	50,000	153,300	209,300	1,605,900	2,735,500	2,792,750	2,851,500	0	0	0
7005 Pressure Enhancement	11,103	0	0	0	53,530	109,420	111,710	0	0	0	0
7005 Fire Flow Upgrades	0	0	0	0	0	109,420	111,710	114,060	116,340	118,670	120,920
7005 DMA establishment	0	0	0	0	53,530	54,710	0	0	0	0	0
7005 Water Loss Reduction Programme	158,517	100,000	102,200	104,650	107,060	153,188	156,394	171,090	174,510	178,005	181,380
7005 Natural Hazards Risk Remediation	105,678	100,000	102,200	104,650	123,119	125,833	128,466	136,872	349,020	356,010	1,209,200
7005 Maitai Pump Station upgrade	100,000	100,000	51,100	1,046,500	1,605,900	1,094,200	558,550	0	0	0	0
7005 WTP Fluoride Dosing	532,921	287,331	0	0	0	0	0	0	0	0	0
7005 Other Sundry: Maitai Planting	15,852	16,500	16,863	17,790	18,200	18,601	20,108	20,531	20,941	22,547	22,975
7005 Capital: Atawhai No.2 Reservoir	80,485	750,000	1,533,000	1,726,725	2,676,500	1,094,200	0	0	0	0	0
7005 Dam Upgrades	1,154,396	2,173,723	511,000	523,250	0	0	0	0	0	0	0
7005 Maitai Pipeline Hazard mitigation	0	50,000	51,100	104,650	107,060	0	0	0	116,340	118,670	120,920
7005 WTP New Clear Water Reservoir	0	0	0	0	0	109,420	167,565	171,090	1,745,100	1,780,050	0

7005 Water network upgrades	0	0	0	0	0	0	0	0	1,163,400	118,670	120,920
7005 Telemetry/Control Upgrade	65,000	50,000	71,540	36,628	42,824	38,297	78,197	46,765	40,719	41,534	94,318
7005 Water supply H&S risk mitigation programme	21,136	21,000	21,973	22,500	23,018	24,072	24,576	25,093	26,176	26,701	27,812
7005 Taumata Arowai - Contractor access to mains	100,000	100,000	102,200	0	0	0	0	0	0	0	0
7005 Flood Recovery 2022 - WTP	232,476	150,000	153,300	156,975	107,060	0	0	0	0	0	0
7005 Flood Recovery 2022 - Headworks	131,892	150,000	102,200	104,650	107,060	0	0	0	0	0	0
7005 Flood Recovery 2022 - Reticulation	30,792	100,000	102,200	261,625	107,060	0	0	0	0	0	0
7005 Climate Change Emission Reduction Projects	0	0	0	0	53,530	54,710	55,855	171,090	58,170	59,335	604,600

## Appendix D: Long Term Plan 2024 – 2034 Significant Forecasting Assumptions

Significant Forecasting Assumptions 2024-2034	Description of risk 2024-2034		Impact if assumption not correct 2024-2034	Mitigation 2024-2034																																												
<b>Demographics</b>																																																
<b>Population growth</b>																																																
<p>Nelson’s population is expected to increase by 5,431 between 2024 and 2034 to 60,837. The projections suggest a relatively modest annual average growth rate for 2023- 2033 of around 0.9%. Growth rates are likely to decline over time due to structural population ageing. The rates of growth are based on commissioned demographic analysis and reflect the medium scenario projections from the findings of this analysis. These projections are higher than those produced by Statistics New Zealand, primarily due to higher net migration assumptions used for this analysis.</p>	<p>If Nelson’s population growth is higher than projected, it risks putting pressure on Council services and infrastructure. If it is lower than projected Council risks over investing in services.</p>		<p>Low</p>	<p>Council is careful when applying population growth estimates to its infrastructure planning, given the uncertainties, so there is generally a good margin for error should growth be higher than projected. Growth projections are reassessed for each Long Term Plan and adjustments made to Council’s work programme. New infrastructure is usually built for the medium to long term so there is the ability to draw on that future capacity if population growth is higher than projected. This limits the risk exposure<sup>42</sup>.</p>																																												
<b>Ageing population</b>																																																
<p>The proportion of the population aged 65 years and over is projected to increase from 21% in 2023 to 26% in 2033. As the population ages, it is assumed the proportion of our population on fixed incomes will increase, with a corresponding pressure on Council to limit rates increases. An ageing population also requires a different balance of services/facilities/activities and changes in spending patterns across Council activities.</p>	<p>If the population age profile varies from what is forecast, particularly if there is accelerated growth in the ageing population, it risks putting pressure on Council to change the type of facilities and services that it provides.</p>		<p>Medium</p>	<p>Risks can be mitigated by Council working with the community to prepare for these changes, and appropriately modifying investments in assets and the provision of services.</p>																																												
<b>Growth in rating units</b>																																																
<p>It is assumed that the growth in rating units across the next ten years of the Long Term Plan is as follows:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Growth</th> <th>Number of rating units</th> <th>Year on year increase</th> </tr> </thead> <tbody> <tr><td>2024/2025</td><td>0.95%</td><td>23538</td><td></td></tr> <tr><td>2025/2026</td><td>0.94%</td><td>23760</td><td>222</td></tr> <tr><td>2026/2027</td><td>0.93%</td><td>23981</td><td>221</td></tr> <tr><td>2027/2028</td><td>0.93%</td><td>24203</td><td>222</td></tr> <tr><td>2028/2029</td><td>1.71%</td><td>24618</td><td>415</td></tr> <tr><td>2029/2030</td><td>1.69%</td><td>25034</td><td>416</td></tr> <tr><td>2030/2031</td><td>1.66%</td><td>25449</td><td>415</td></tr> <tr><td>2031/2032</td><td>1.63%</td><td>25865</td><td>416</td></tr> <tr><td>2032/2033</td><td>1.60%</td><td>26280</td><td>415</td></tr> <tr><td>2033/2034</td><td>0.69%</td><td>26462</td><td>182</td></tr> </tbody> </table>	Year	Growth	Number of rating units	Year on year increase	2024/2025	0.95%	23538		2025/2026	0.94%	23760	222	2026/2027	0.93%	23981	221	2027/2028	0.93%	24203	222	2028/2029	1.71%	24618	415	2029/2030	1.69%	25034	416	2030/2031	1.66%	25449	415	2031/2032	1.63%	25865	416	2032/2033	1.60%	26280	415	2033/2034	0.69%	26462	182	<p>Economic conditions, demographic factors, and landowner/ developer decisions can cause variations in rating unit growth meaning growth could be higher or lower than projected.</p>		<p>Low</p>	<p>Council has used current property information from its valuation service provider (Quotable Value) to assess the level of growth in rating units, along with an assessment of year on year increases from recent years. This information is as accurate as possible, so the risk of variation is limited.</p>
Year	Growth	Number of rating units	Year on year increase																																													
2024/2025	0.95%	23538																																														
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42. The 2023 Census figures released in May 2024 indicate that Council’s population estimate for June 2024 may be slightly high.

Significant Forecasting Assumptions 2024-2034	Description of risk 2024-2034	Impact if assumption	
		not correct 2024-2034	Mitigation 2024-2034

### Relationships with iwi

<p>Strengthening an authentic partnership between Council and iwi of Te Taihū is central to improving outcomes for iwi/Māori and the Whakatū/Nelson community.</p> <p>It is assumed that Council will resource activities to support greater opportunities for:</p> <ul style="list-style-type: none"> <li>• Meaningful engagement between iwi and Council (i.e. regular meetings at governance, management and operational levels)</li> <li>• Increased iwi participation in Council decision making</li> <li>• Increased engagement and partnership with iwi and Council on legislative proposals and changes.</li> </ul> <p>Staff and elected members will continue to develop their understanding of iwi and Māori priorities, legislation, te reo Māori and tikanga Māori.</p>	<p>Establishing ways of working with iwi/Māori requires resources that may not be available. For example (i) iwi have limited capability and capacity to engage on the volume of Council projects; (ii) Council may not have capability and capacity to resource the needs of the relationship; (iii) staff may not have time available to attend professional development courses to improve cultural capability.</p> <p>The risk of not resourcing opportunities to strengthen an authentic Council iwi partnership are:</p> <ul style="list-style-type: none"> <li>• It being perceived as an insincere relationship</li> <li>• Unrealistic expectations from both Council and iwi, leading to tensions</li> <li>• A competing requirement of iwi staff time that is under resourced. Council working reactively and inefficiently with iwi.</li> </ul>		<p>Medium</p>	<p>Council will focus on strengthening its relationship with iwi by:</p> <ul style="list-style-type: none"> <li>• Funding that supports iwi capability and capacity to engage with Council</li> <li>• Attracting staff who are culturally competent</li> <li>• Developing planning tools and strategies that are reflective of a meaningful partnership with iwi/Māori.</li> </ul> <p>Supporting opportunities for staff cultural competency development.</p>
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### Climate change and natural disasters

#### Climate change risks and impacts

<p>The expected risks of climate change for Nelson are based on science and projections from the Intergovernmental Panel on Climate Change, NIWA and governmental advice from the Ministry for the Environment.</p> <p>Sea-level rise projections are based on a range of global emissions scenarios developed by the Intergovernmental Panel on Climate Change and recommended by the Ministry for the Environment. Council considers a range of sea-level rise scenarios in its planning.</p> <p>It is assumed that it is not possible to reduce the mid-century warming, due to the amount of greenhouse gas emissions already accumulated in the atmosphere – i.e. that the projections for mid-century are already ‘locked in’.</p> <p>Current roles and responsibilities in relation to climate change adaptation are unclear and expected to be clarified through legislative reform. It is assumed that, under any new legislation, Council will have a lead role to play in preparing Nelson for the impacts of climate change.</p>	<p>Increased numbers or severity of extreme weather events, such as heavy rainfall with flooding and slips, and dry weather resulting in drought and fire, would lead to increased costs for Council in both responding to the events and building greater resilience into infrastructure.</p> <p>There is a risk that inadequate assessment of the likelihood and impact of more frequent higher intensity natural hazard events would leave Council and the community unprepared to respond appropriately.</p> <p>Inadequate investment to reduce exposure to climate change risks would result in significantly greater costs than if proactive measures were taken. It would also lead to greater disruption to the community and essential services, and increased costs to Council. Over estimation of the impacts may result in Council having over-spent in preparing for risk factors.</p>		<p>Medium</p>	<p>To prepare Nelson for the impacts of climate change, Council is following the Dynamic Adaptive Pathways Planning (DAPP) process, recommended by the Ministry for the Environment in the Coastal Hazards and Climate Change Guidance for Local Government. This process enables Council to develop an adaptation plan the full extent and timing of climate change impacts is uncertain. Parts of Nelson Central are subject to flood risks and future intensification will be guided by the outcomes of the DAPP process. Over the period 2024-2034, Council will continue to work through the steps in the DAPP process, adapting the approach as new climate information is made available and drivers of change occur.</p> <p>Council will also closely monitor updates to ensure it is following the latest science, projections and guidance. Plan Change 29 (the Housing Plan Change) limits opportunities for intensification in low lying areas. Subsequent plan changes will be required to increase the resilience of the community, including regionally significant infrastructure.</p> <p>Council will continue to make allowances for increased stormwater management for areas that are identified as low lying and flood prone.</p>
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#### Greenhouse gas emissions

<p>It is assumed that current policies (as set out in Aotearoa New Zealand’s Emissions Reduction Plan) will be implemented and New Zealand’s emissions will reduce in line with emissions budgets.</p> <p>Over the next few years, there is likely to be significant further central government policy reforms changing the direction to local government and potentially creating different priorities for Council’s climate change mitigation and adaptation work.</p>	<p>A change in central government direction could result in a different emissions reduction pathway and policies than what is set out in the current Emissions Reduction Plan.</p> <p>With growing legislative requirements and community expectations to respond to climate change, there needs to be a corresponding increase in resources available for the climate change work programme. If this does not occur,</p> <p>Council risks not meeting expectations, failing to meet its operational emissions reduction targets, and failing to implement legislative requirements.</p> <p>Council has previously made a number of statements and commitments (for example through declaring a Climate Emergency) to provide a leadership role on climate change. If this is not supported by a comprehensive work programme that is well-resourced, Council risks failing to meet community expectations.</p>		<p>Medium</p>	<p>Staff will closely monitor developments in central government policy, to anticipate possible shifts in direction and reprioritise work accordingly.</p> <p>The Long Term Plan includes appropriate allocation of financial and staffing resources for the climate change work programme, and funding to grow the resource allocation to match the growing workload over time.</p> <p>Climate change adaptation and mitigation objectives will be embedded across key Council work programmes, in particular: transport, waste management and minimisation, forestry, resource management planning and utilities.</p> <p>Engagement will be undertaken with the community to set targets that are ambitious, attainable and consistent with scientific evidence regarding the reductions needed to limit global warming to 1.5 degrees. Staff will report regularly to Council on progress with this work programme.</p>
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Significant Forecasting Assumptions 2024-2034	Description of risk 2024-2034	Impact if assumption not correct 2024-2034	Mitigation 2024-2034
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### New Zealand Emissions Trading Scheme (NZ ETS)

<p>Council has assumed that the NZ ETS costs will rise in the medium to long term as a result of amendments to the Climate Change Response Act 2002, including changes in NZ ETS settings. NZ ETS unit pricing in the short-term is likely to fluctuate before increasing. This will impact the Regional Landfill Business Unit.</p>	<p>Rising NZ ETS costs could result in increasing costs to Council from waste emissions managed under the Regional Landfill Business Unit. This will provide greater financial incentives to reduce emissions at the landfill.</p>	<p>Medium</p>	<p>If the increase in NZ ETS costs is materially higher than assumed, Council may need to increase waste management fees and charges, increase rates to fund these costs or reduce waste minimisation funding. The Regional Landfill Business Unit is proposing to mitigate the increase by improving landfill gas collection and destruction, pre-purchasing units to fix the cost, and to pass the remaining cost to consumers through landfill charges.</p>
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### Natural disasters

<p>It is assumed that natural disasters will occur in the Nelson area during the life of the Long Term Plan. Nelson is located on a fault line meaning a major earthquake is not a matter of "if but when".</p>	<p>Greater than anticipated magnitude or frequency of natural disaster events could result in greater costs for Council in both recovery and in building greater resilience into infrastructure.</p>	<p>High</p>	<p>A characteristic of Nelson is the concentration of lifelines infrastructure (road network, port, airport, wastewater treatment ponds etc.) on or near hazards such as fault lines, vulnerable soils, low-lying ground and the coast. Increasing awareness of earthquake prone buildings through legislative requirements will increase understanding of earthquake resilience in buildings and infrastructure. Priority has been given to identification (completed) and remediation of unreinforced masonry buildings in Nelson's central city. Strategic transport routes for emergency response have been identified and approved. Identification of potentially earthquake prone buildings along these routes were completed in 2022. Owners of these prioritised buildings will be required to complete seismic work within 12.5 years of identification. Identification of other potentially earthquake prone buildings is to be completed by 2027. Owners of these will have 25 years to complete seismic work. Plans are made through the Nelson Tasman Civil Defence Emergency Management Group which illustrate the degree of risk faced by Nelson in terms of natural disasters including earthquakes (infrequent but high consequence) and flooding (likely but lower consequence). Council has sufficient borrowing capacity above its self-imposed debt cap to be used as funding in the case of a natural disaster where costs exceed its emergency reserves.</p>
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### Legislative and Regulatory Changes

<p>There are reforms and legislative changes impacting local government that are likely to progress or come into effect during the period of the Long Term Plan. It is assumed that Council will be affected by other government legislation. However, as the nature of these changes is not known, it is not possible to make appropriate financial provision at this stage, except where noted elsewhere in these forecasting assumptions. It is assumed that the Council will have the opportunity to submit on legislation likely to affect it and that central government will work with councils to ensure that any legislative changes are managed appropriately.</p>	<p>Central government's proposed changes could require changes to Council's work programme and budgets and decrease work in some areas. The changes could create uncertainty and require re-prioritisation of work programmes.</p>	<p>Low</p>	<p>By working closely with central government, Council can best understand its obligations under upcoming regulatory and legislative changes. This will allow Council to move resources to respond to changes or to seek additional resources, if needed, through future Annual Plans. Council's work programme in this area will change as needed to respond.</p>
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### Amalgamation of water services – Water Services Reform

<p>It is assumed Council will continue to manage water supply, wastewater, and stormwater for the lifetime of the Long Term Plan 2024-2034. Therefore, funding for assets, staff and contractors who deliver water services has continued to be included in the budgets.</p>	<p>There is still some uncertainty about the future management of the three waters services, due to the Government's proposed Local Waters Done Well reforms. However, these reforms are early in the policy process and it is likely that Council will continue to deliver three waters services for several years. If Council's role in managing and delivering water services changes prior to the next review of the Long Term Plan in 2027, it would mean Council's Long Term Plan would need significant adjustment and it could have impacts on Council finances, staffing, capital works programmes and operations.</p>	<p>High</p>	<p>Council will respond to the direction provided by the Government and engage closely with the Te Taihu councils, iwi and stakeholders as needed.</p>
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### Resource management reforms

<p>The new Government has indicated an intention to reform the Resource Management Act 1991. The nature and extent of these reforms have been signalled to occur in phases but the full detail is currently unknown. Council has allocated budget in the Long Term Plan to review the Nelson Resource Management Plan or undertake other resource management policy development as required under the proposed reforms.</p> <p>It is assumed there will be obligations on Council to develop, implement and maintain strategic growth and resource management plans, in some form, and that Council will continue to have a role in the regulatory authorising environment and monitoring and compliance functions.</p>	<p>Until the reforms and associated legislative changes are finalised, it is difficult to estimate the likely impact on Council. However, the reforms may bring with them obligations for Council to fund a changed planning system.</p>		<p>Low</p>	<p>Council will make any adjustments necessary to respond to changes to the resource management legislation through annual plans and the Long Term Plan 2027–2037.</p>
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### Future for Local Government Review

<p>In April 2021, the Government established a Ministerial Inquiry into the Future for Local Government. The overall purpose of the review is to “identify how our system of local democracy needs to evolve over the next 30 years, to improve the wellbeing of New Zealand communities and the environment, and actively embody the treaty partnership.”</p> <p>The review includes, but is not limited to, roles and functions of local government, as well as representation, governance, funding and financing.</p> <p>It is unclear whether the new Government will follow through with any of the recommendations in the review. The assumption is that any substantial change will be slow to result. Council has therefore prepared the Long Term Plan 2024-2034 assuming that its existing roles and functions (not impacted by other reforms) will continue.</p>	<p>There is potential for a gradual change to how Council works and is funded due to these reforms. This could have ramifications for work programmes, operational and capital expenditure, and budgeting. It may also have impacts on costs for Council or changes to the way Council delivers services.</p> <p>However, until the Government has made its intentions clear it is difficult to estimate any impact on Council.</p>		<p>Low</p>	<p>The Council will make any adjustments necessary to respond to any changes to local government legislation through annual plans and the Long Term Plan 2027–2037.</p>
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### Economic environment

#### Economic Forecasts

<p>It is assumed Nelson’s economy will grow at a similar rate to the long-run average for New Zealand for most of the 10 years. Treasury expects inflation to fall to 4.6% in 2024 and drop inside the Reserve Bank’s target band of 1-3% inflation by 2025. Treasury has forecast New Zealand’s real production GDP to change as follows to 2027:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Average Annual % Change</th> </tr> </thead> <tbody> <tr> <td>2024</td> <td>1.3</td> </tr> <tr> <td>2025</td> <td>2.0</td> </tr> <tr> <td>2026</td> <td>3.3</td> </tr> <tr> <td>2027</td> <td>3.2</td> </tr> </tbody> </table> <p>Any ongoing economic downturn will affect ratepayers’ and businesses’ ability to pay for Council services and affect people’s wellbeing. It will also have an impact on Council’s work programme and delivery of services.</p> <p>Tourism is an important component of the Nelson economy, with it contributing around 4.1% to the city’s GDP and it has been affected by COVID-19 restrictions in recent years. Visitor arrivals to New Zealand are expected to grow an average of 4% each year, reaching 5.1 million visitors in 2025. Spend is forecast to grow at a slightly higher rate than the growth of visitor numbers, suggesting that spend per visitor will increase.</p>	Year	Average Annual % Change	2024	1.3	2025	2.0	2026	3.3	2027	3.2	<p>A downturn in the regional economy and higher unemployment may exacerbate affordability issues in the community, with some residents and businesses finding it more difficult to meet financial commitments including rates.</p> <p>This would also impact Council’s ability to make financial commitments.</p>		<p>Medium</p>	<p>A focus on affordability, value for money and continued Council investment in sustainable projects which will help reinvigorate the economy and improve economic wellbeing.</p>
Year	Average Annual % Change													
2024	1.3													
2025	2.0													
2026	3.3													
2027	3.2													

### Inflation/price changes

<p>Council has used inflation figures provided by BERL in preparing its Long Term Plan 2024-3024, along with other councils in New Zealand. BERL has provided two sets of figures – one set with water infrastructure and one set without water infrastructure.</p> <p>Council has used the figures that include water infrastructure for the ten years of the Long Term Plan.</p> <p>Financial year</p> <p>LGCI</p> <p>2024/25 – 2.9</p> <p>2025/26 – 2.2</p> <p>2026/27 – 2.3</p> <p>2027/28 – 2.3</p> <p>2028/29 – 2.2</p> <p>2029/30 – 2.1</p> <p>2030/31 – 2.0</p> <p>2031/32 – 2.0</p> <p>2032/33 – 1.9</p> <p>2033/34 – 1.9</p>	<p>Inflation higher than expected would increase costs for Council, reducing its programme to invest in and maintain infrastructure and facilities, and impacting its ability to deliver the levels of service set out in the Long Term Plan 2024-2034.</p> <p>There is still a lot of uncertainty about forecasting inflation. Previous forecasts have varied from the actual rates of inflation.</p>		<p>Medium</p>	<p>If inflation is higher than assumed, Council will consider increasing rates and charges, reducing its programme of investment in facilities and infrastructure, increasing debt and/or reducing levels of service.</p> <p>If inflation is lower than assumed, Council costs will be lower and Council will consider reducing rates and/or fees and charges or selectively increasing levels of service.</p>
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### Interest rates

<p>In preparing the Long Term Plan 2024-2034, Council has assumed the following interest rates, based on forecasts provided by PwC, Council’s Treasury Advisors.</p> <p>These interest rates include the cost of both funds already borrowed and anticipated new debt at anticipated future interest rates.</p> <p>Financial Year</p> <p>2024/25 – 4.85</p> <p>2025/26 – 4.63</p> <p>2026/27 – 4.63</p> <p>2027/28 – 4.79</p> <p>2028/29 – 4.9</p> <p>2029/30 – 5.06</p> <p>2030/31 – 5.21</p> <p>2031/32 – 5.21</p> <p>2032/33 – 5.21</p> <p>2033/34 – 5.21</p>	<p>Higher interest rates would increase costs for Council.</p>		<p>Medium</p>	<p>Projected interest costs are largely hedged against changes in floating interest rates over future years. Therefore, the impact of interest rate increases over future years is low. However existing hedge commitments reduce over time (in accordance with Council’s Policy) so that in the later years of the Plan the impact of changing interest rates would be greater which would be met either by increasing rates or adjusting down future borrowing requirements. Council manages interest rate exposure in accordance with its Liability Management Policy and in line with advice from Council’s independent treasury advisor.</p>
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### Labour market

<p>There are ongoing labour market shortages in particular skilled areas making it difficult for Council to hire staff with appropriate technical qualifications and experience needed to deliver work programmes. Sustained labour market shortages are expected in many of the occupations that Council is likely to be recruiting for, which will be compounded by a decreasing proportion of the Nelson population being of working age. Shortages in particular skill areas are highly likely and demand for more flexible and hybrid working options will increase.</p> <p>The shrinking of our working-age population, as well as the region’s average wage being the lowest in the country, will contribute to ongoing problems maintaining Council’s workforce.</p>	<p>A more competitive marketplace with accompanying labour shortages would mean Council may not be able to deliver work programmes on time due to the absence of enough sufficiently qualified staff. Greater reliance on consultants to fill temporary workforce gaps may increase costs.</p>		<p>Low</p>	<p>Council would reconsider service delivery to manage skills shortages, and to help maintain output. Providing remote working options may increase the pool of expertise to recruit from.</p> <p>It is also expected that the proportion of older adults remaining in the workforce will continue to rise, improving incomes at older ages and somewhat mitigating against forecast workforce shortages.</p>
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Significant Forecasting Assumptions 2024-2034	Description of risk 2024-2034		Impact if assumption not correct 2024-2034	Mitigation 2024-2034
<b>Operational</b>				
<b>Useful lives of significant assets</b>				
<p>It is assumed triennial reassessments of the useful lives of significant assets during the ten year period covered by this Long Term Plan will continue. Significant assets will have lifespans that are consistent with initial assessments. The detail of useful lives for each asset category is covered in the Statement of Accounting Policies.</p>	<p>There is a risk of assets wearing out earlier than predicted and funding needs to be found for replacements.</p> <p>There is no extensive damage to Council's local roading network following the diversion of traffic from the State Highway during the August 2022 severe weather event.</p>		<p>Low</p>	<p>Council would make changes to underlying capital expenditure programmes to allocate funding for replacement assets.</p>
<b>Vested assets</b>				
<p>Vested Assets are engineering assets, such as roads, paid for by developers and vested to Council on completion of the subdivision. It is assumed that vested assets will remain the same over the term of the Plan as projects from the previous five years are completed. If required, additional budget can be added to the plan on account of private development agreements. However, as these agreements occur as and when private developers undertake work, this figure is largely indeterminable in advance. Council assumes that the impact of vested assets will be neutral, in that the costs associated with the additional assets will be offset by a proportionate increase in rates revenue.</p> <p>The impact of higher or lower growth is not considered significant.</p>	<p>Council has more assets vested and this could increase the depreciation and maintenance expense in subsequent years.</p>		<p>Low</p>	<p>Vested assets must be maintained by Council and depreciation provided for, therefore if growth is higher than forecast Council will increase its budget to maintain those assets and provide for the additional depreciation.</p>
<b>Cost to deliver capital projects</b>				
<p>A competitive local market means tenders are being received with prices above expectations. Furthermore, additional requirements and compliance issues that are included in contractual terms, such as carbon and freshwater requirements and waste minimisation, may increase prices further. Council will continue to work with contractors to achieve a living wage for their staff. It is assumed that this escalation of prices will continue in the medium term. It is assumed that major projects will be completed on time and within budget but acknowledges that not all projects will be completed on time as unforeseen issues will occur.</p>	<p>Increases in project prices resulting in higher costs would have potential upward pressure on rates and debt. Delays in project completion or additional costs may result in other major projects being reassessed in terms of both available budget and timeframes for completion.</p> <p>Important projects that run into significant cost increases, that are deemed essential, may require rates or borrowing increases, or reallocation of funds from other projects to offset the higher costs.</p>		<p>High</p>	<p>Increased flexibility in the capital works programme around timing of projects could help mitigate this trend. Reassessing Council's work programme to ensure adequate consultation and analysis prior to work commencing will be undertaken so that Council has the best information available.</p>
<b>Delivery of the capital programme</b>				
<p>Notwithstanding best intent to deliver the capital works programme, Council assumes that the full capital works programme will not always be able to be fully delivered for a variety of reasons including project delays, weather and a range of other constraints. Council has also made an assumption that it is unlikely to use the full amount of contingency for every project. An overall downward adjustment of approximately 10% per year to the total capital programme cost has therefore been made to avoid overfunding the activities.</p>	<p>There is a risk that the cost of the capital programme may be more or less than the 90% budgeted for. If more is spent Council's debt will be more than forecast with an associated increase in costs.</p> <p>Delays in project completion or additional costs may result in other major projects being reassessed in terms of both available budget and timeframes for completion. Important projects deemed essential that run into significant cost increases, may require rates or borrowing increases or reallocation of funds from other projects to offset the higher costs.</p>		<p>High</p>	<p>Increased flexibility in the capital works programme around timing of projects could help mitigate this matter. Council ensures adequate consultation and analysis prior to work commencing so that it has the best information available to adjust the work programme as needed. Council will consider the impacts on rates, debt and levels of service when making any adjustments to the work programme. Priority will be given to making adjustments which reduce rates and debt increases but which are also least likely to have a negative impact on the Long Term Plan levels of service.</p>

Significant Forecasting Assumptions 2024-2034	Description of risk 2024-2034		Impact if assumption not correct 2024-2034	Mitigation 2024-2034
<b>Earthquake prone buildings</b>				
<p>It is known that Council faces future costs with regard to earthquake prone building (EPB) assets. Civic House has earthquake prone status and being a EPB Priority Building, and Council premises, has a Taskforce assigned to address the compliance requirement. Council has four assets with EPB notices and it is assumed these properties will remain Council owned. Work will need to be completed between now and 2034 on these properties. Council as a Territorial Authority is required to identify EPBs and issue EPB notices. Identification of all priority buildings was completed by 30 June 2022, and all remaining EPB notices need to be completed by 30 June 2027.</p>	<p>Significant additional expenditure on earthquake strengthening buildings risks not being met by assigned budgets.</p> <p>EPB work can initiate other compliance work as part of consenting processes, therefore there is a risk that required work could become more significant than anticipated.</p>		<p>Medium</p>	<p>Processes are underway to seek Council direction to confirm intention for each asset with EPB status – options that may be considered are whether to a) retain and strengthen, b) deconstruct, or c) dispose of asset. Not all options are available for all assets but understanding Council's preferred direction will allow for staff to manage time, target tasks to be done, and set appropriate budgets.</p>
<b>Pandemics</b>				
<p>It is assumed New Zealand will avoid significant impacts from an epidemic or pandemic including COVID-19, and that no further lockdowns or major border restrictions are required.</p>	<p>A pandemic or epidemic could have significant impact on New Zealand and the Nelson region resulting in restrictions and/or illness, which would have a major impact on Council's ability to deliver services.</p>		<p>Medium</p>	<p>Council will maintain its organisational understanding of managing pandemic risks in the workplace and capacity of the organisation to work remotely.</p>
<b>Resource consents</b>				
<p>It is assumed that any resource consents held by Council that are due for renewal during the life of the Long Term plan 2024-2034 will obtain consent. It is assumed, however, that the consents will be subject to a more rigorous process, given national direction in areas such as freshwater.</p> <p>In terms of Council's role as regulator adjusting to the new resource consent regime, it is assumed there will be more permitted standards meaning less resource consents to process but more monitoring requirements/expectations of those permitted standards. It is assumed there will not be a drop in the overall number of staff or costs but potentially a change in roles to be able to undertake monitoring as well as processing.</p>	<p>Conditions of resource consents could be altered and significant new compliance costs or consents may not be able to be renewed as expected.</p> <p>Changes to the staff roles are required when transitioning to the new resource consent regime, to be able to undertake more monitoring as well as processing.</p>		<p>Medium</p>	<p>Budgets based on current expected levels of activity. More effort may not transfer into increased recovery so Council will have to carefully monitor expenditure in the absence of more capacity.</p>
<b>Financials</b>				
<b>Loan arrangements</b>				
<p>It is assumed that new borrowing or renewal of existing borrowings can be obtained from financial institutions including the Local Government Funding Agency on competitive terms given Council's strong credit rating.</p>	<p>Access to committed loan facilities less than expected may result.</p>		<p>Medium</p>	<p>Council minimises this risk by maintaining a strong credit rating and a mix of current and non-current borrowings as per its Liability Management Policy. Council's guarantor status for the Local Government Funding Agency also minimises the risk of not being able to borrow the funds it requires. Council also pre-funds upcoming borrowing maturities early to lower the risk of not being able to borrow.</p>
<b>Insurance costs</b>				
<p>It is assessed that insurance cover for Council assets will be available throughout the period of the Long Term Plan 2024-2034 and that premiums will rise faster than the rate of inflation. Council expects insurance base costs to rise by 15-20% plus the impact of inflation on asset values in those years.</p>	<p>There is a risk that premiums increasing above inflation and/ or Council cannot obtain 100% cover.</p>		<p>Medium</p>	<p>Council may reduce other budgets or reassess levels of service to reduce costs and provide more funds for covering premiums. Council could also increase rates. Also, Council is currently looking to reduce its level of insurance cover by Council taking more financial risk to manage the increased premiums.</p>
<b>Return on investments</b>				
<p>It is assumed that the return on investments, including dividends from Council Controlled Trading Organisations and retained earnings on subsidiaries, will continue at current levels, plus inflation.</p>	<p>Returns could be lower than expected.</p>		<p>Low</p>	<p>This would impact on Council's ability to fund services and would likely require an increase in rates. Alternatively, Council could consider reducing levels of service.</p>

Significant Forecasting Assumptions 2024-2034	Description of risk 2024-2034	Impact if assumption	
		not correct 2024-2034	Mitigation 2024-2034

**Revaluation of non-current assets**

<p>Council’s accounting policy provides for its most significant asset classes (infrastructure assets and land, excluding land under roads) to be revalued with sufficient regularity as long as the carrying value does not differ materially from fair value.</p> <p>The revaluations for infrastructural asset classes: sewerage, water, drainage, and roads are updated annually with full valuations being completed bi-annually and an index valuation in alternate years. A registered valuer assesses asset unit rate replacement values through analysing areas such as current contract pricing, comparisons of similar councils, impacts of regional and national influences such as weather events, and CPI indexes which are then applied to a full valuation.</p> <p>Assets abandoned during the financial year are disposed then confirmed rates are applied to all Council’s infrastructure assets generating a total asset replacement cost, depreciated replacement cost and depreciation. For intervening years, infrastructural assets are revalued by means of applying an inflation index and additional uplift where necessary to align with market rates, whilst accounting for disposals and additions at cost. Each year the valuation produced is peer reviewed by a registered valuer. The latest full valuation was the 2021-22 year and was reviewed by WSP New Zealand Ltd. The next full valuations will be taking place in the following years: 30 June 2024, 30 June 2026, 30 June 2028, 30 June 2030, 30 June 2032, 30 June 2034.</p> <p>To forecast for these valuations in this Long Term Plan, we revalue Infrastructural asset classes: sewerage, water, drainage, and roads every year based on Local Government Cost Index (LGCI) Capex.</p> <p>Land is reviewed annually and revalued at market value every five years or if there is a material movement. The latest valuation was conducted as at 30 June 2021 by QV Valuation. We have forecast land revaluations to occur in years 3, 6 and 9 of the Long Term Plan.</p> <p>We revalue Property Plant and Equipment (PPE) every year based on Local Government Cost Index (LGCI) Capex.</p> <p>Depreciation is calculated based on revalued PPE each year – depreciation on existing assets therefore increases each year starting in Year 2 (as a result of the prior year revaluation).</p>	<p>Actual revaluation results could differ significantly from those forecast in this Long Term Plan.</p>		<p>Medium</p>	<p>Council will be maintaining best practice in accounting policies to minimise risk of assets’ carrying value differing significantly from fair value.</p>
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**NZ Transport Agency Waka Kotahi Funding**

<p>Council assumes the NZ Transport Agency Waka Kotahi Financial Assistance Rate (FAR) will remain at the same rate (51%) over the term of the Long Term Plan 2024- 2034 and only programmes/projects with strong alignment with the Government Policy Statement on land transport will receive National Land Transport Funding (NLTF). It assumes that the projects included years 4 to 10 of the Long Term Plan will be approved as fitting within the new National Land Transport Funding framework when it is released.</p>	<p>Projects and programmes that do not qualify for National Land Transport Funding will need to be deferred which may impact levels of service or continued at 100% local share which is likely to impact rates and debt. If the FAR is reduced or projects no longer supported, Council will need to decide whether to increase funding (an impact of approximately \$5-20M, typically on debt over years 4 to 10) or to remove work from the plan (which may impact on services).</p>		<p>Medium to high (depending on the level of change)</p>	<p>Changes to the funding priorities of NZ Transport Agency Waka Kotahi are outside Council’s control, however any significant change to the FAR or NLTF eligible works may require Council to reassess its transport work programme in order to reduce costs and/or to make up operational and/or capital shortfalls, with potential impacts on rates and debt or levels of service.</p>
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**Co-funding arrangements**

<p>It is assumed that for projects where other partners are contributing part of the funding, this funding will continue to be available. It is assumed that where Council could be eligible for government funding, e.g. infrastructure and community projects, Council will also seek this funding. Council will seek co-financing where available from central government towards implementation of climate change projects.</p>	<p>Partners may no longer be in a position to provide funding which may result in an increased level of funding from Council, or the termination of the project.</p>		<p>Medium</p>	<p>If co-funding arrangements changed, the viability of projects would be reviewed and Council would need to consider its ongoing commitment. Funding for projects may be sought from other sources.</p>
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**Sources of funds for the future replacements of assets**

<p>It is assumed that funding for the replacement of existing assets will be obtained from the appropriate sources as detailed in Council’s Revenue and Financing Policy.</p>	<p>There is a risk that a particular funding source is unavailable.</p>		<p>Low</p>	<p>Depreciation is used to fund renewals and is funded mainly through rates and user charges. Should other sources of capital funding such as subsidies or development/financial contributions differ from levels forecast in a particular activity, Council is able to access borrowings through various sources as explained under Loan arrangements section.</p>
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## Appendix D: Long Term Plan 2024 – 2034 Water, Wastewater and Stormwater specific Challenges, Assumptions and Risks

### Water

#### Challenges:

##### **Climate change**

Both increased droughts and extreme rainfall events can limit access to water from the Maitai and Roding rivers, increasing our dependence on water from the Maitai Dam. It can store up to 4.1 million cubic metres of water, giving us an extremely valuable buffer for getting through both drought and storm events.

##### **Natural hazards**

The piped water supply network is at risk of damage during earthquakes and damage from weather events.

Nelson's water supply is dependent on the water sourced from the Maitai and Roding rivers, the Maitai Dam and the Roding Weir. We rely on very long pipelines to transport this water to the Taranaki Water Treatment Plant, and these pipes are vulnerable to damage from earthquakes and flood events (and land slips associated with these events).

Having the second pipeline between the Maitai River water sources and the water treatment plant provides security against damage to one or other of the pipelines. In addition, the ultra-filtration process at the water treatment plant gives us flexibility and peace of mind to use water from a variety of raw water sources of variable quality.

The pipes which deliver water from the water treatment plant to households and businesses are also vulnerable to damage during earthquakes and flood events. The specific risks to our network have been investigated and response options are being developed.

Significant sections of the Nelson water supply network were installed in the city from the 1950s–1970s as part of a surge of new developments. These earlier networks are now approximately 60–70 years old, which is why many of them will need to be replaced within the next 30 years. Approximately 20km of pipework (in addition to the normal rate of renewals) will need to be replaced in the 2030s. At today's rates this could cost an additional \$20M-\$30M over and above the normal renewals budget within a 5–10 year timeframe. Draft renewal budgets have been incrementally increased in years 5-10 to address this issue because not investing in these extra renewals would result in more failures in the network and disruptions to the water supply.

##### **Maintaining, renewing and upgrading:**

Planned levels of service for water supply will not be met unless assets are maintained, renewed and upgraded.

- Pipe materials – Some pipe materials have not performed as well as expected which means they need to be replaced earlier than anticipated. We will need to continue doing this for the next 8–10 years before returning to a more normal renewal strategy.
- Maitai pipeline – Council will continue to use the original above ground pipeline between the Maitai Dam and the water treatment plant for as long as it remains economical to do so (alongside the more recently installed duplicate pipeline). A multi-year project to renew or repair necessary sections of original above ground pipe below the dam will start from 2027/28.
- Maitai Dam – The Maitai Dam is considered a high impact structure as it would pose a significant risk to residents if it collapsed, releasing water down into the Maitai Valley. Although the likelihood of this is extremely low, Council will continue to work with emergency response agencies to plan for this event. Council and the other emergency response agencies will plan to meet with Maitai Valley residents (2024/25) to advise them of the various emergency events for which residents need to develop their own response plans.
- Reticulation constraints – New residential development areas in the eastern parts of the city don't yet have the water supply pipes they will need in the future. Budget has been included in the Long Term Plan for the Council's share of the costs to upgrade one of the first developments in the Mahitahi and Bayview area. This will help support any future development in the wider area (subject to the Environment Court outcome).
- In addition, future residential development and intensification across the city that might need a water supply with a higher flow rate to support sprinkler systems can be addressed as part of the normal renewal programme.

##### **Unaccounted for water:**

Council is unable to account for 20–25% of water supplied through the water supply network. We carry out leak detection within the urban area's water supply network but so far we haven't found any substantial leaks to account for this volume of water losses.

We are continuing to investigate the large trunk mains from the water treatment plant to the urban areas and ensuring all property connections to the network are metered.

We will continue to investigate other potential sources of unaccounted for water use such as contractor use, irrigation services and un-metered fire-fighting connections.

Testing at the water treatment plant in 2020 identified over-recording of flows to the city meaning it was reporting higher volumes of water than were actually occurring. Similar testing has also found that some residential water meters may be reporting lower volumes of water use than is actually occurring. Based on these results, we think a substantial amount of the unaccounted for water is likely to relate to meter performance rather than actual water losses.

In 2021/22, Council replaced approximately 15,000 of the residential water meters installed in the mid-1990s. The remainder will be replaced as they come to the end of their lives in the next 10 years. More accurate water use data will help us to track down the unaccounted for water. Additional testing of larger commercial and industrial meters is planned between 2024/25 and 2026/27.

**Real Water Losses and Total Non-Revenue Water**

Year	Real Water Loss	Total Non-Revenue Water
2016-17	23%	27.4%
2017-18	26.1%	31.6%
2018-19	25.9%	36.9%
2019-20	24.5%	29.3%
2020-21	18.8%	24.4%
2021-22	19.7%	24.8%
2022-23	22.1%	28.4%

**Maitai Dam water**

Using water from the Maitai Dam increases impacts on the water treatment plant processing system.

Council has three raw water sources – the Maitai Dam, Maitai South Branch and Roding River. However, the Maitai Dam is the only reliable source of water when river flows are low, and this makes it critically important to Nelson’s water supply during dry conditions. A 2017 drought security study concluded the Maitai Dam would provide enough water to allow the city to withstand a 1:100 year drought into the latter half of this century.

The water treatment plant has to work harder when processing water from the Maitai Dam, to remove naturally occurring organic material. This is done through a combination of chemicals, and by mechanical cleaning using the ultra-filtration membranes at the water treatment plant.

In 2019 sampling of the water in the Maitai Dam identified an invasive freshwater algae species, *lindavia intermedia*. *Lindavia* is known to cause ‘lake snow’ in freshwater lakes if the right conditions occur for it to bloom. If lake snow did occur in the Maitai Dam it could clog the water treatment membranes. Our intake screens at the water treatment plant reduce this risk, but de-fouling these screens would increase our operational costs.

**Discoloured water**

Some customers receive discoloured water. Over the long term it is important for the city to be able to rely on the Maitai Dam as a raw water source. Operational changes have been made to address discolouration of water by changing the coagulant chemical at the treatment plant from ferric chloride to aluminium chlorohydrate to reduce the amount of iron introduced into the network. This change also has supply chain availability and operational cost benefits. An additional benefit is that the chemical is less hazardous to handle and store than ferric chloride. Some operational changes to the treatment plant have been made to address discolouration of water.

Future work will concentrate on pre-treating the water from the Dam via a primary clarifier, or more regular replacement of the membranes at the water treatment plant.

A method for removing residual oxide material from inside the water supply pipes is also being investigated to reduce discolouration of water.

**Maitai River water quality**

There is a need to improve the quality of water discharges from the Maitai Dam into the Maitai River to avoid impacts on the downstream environment.

Taking water directly from the south branch of the Maitai River (above the dam) has an impact on the quantity of water remaining in the river. We replace that water by discharging stored water from the Maitai Dam into the river, but this is of a lower quality than the water taken directly from the south branch of the Maitai River.

Council is undertaking a project to aerate the water in the Maitai Dam so that it contains the levels of oxygen needed to support aquatic life when it is released into the river. Construction of the aeration works is expected to be completed in 2025/26.

### Assumptions:

Assumptions In addition to general forecasting assumptions that apply to all of Council's work, the following specific assumptions apply to the water supply activity:

- Renewals will be continued at a rate that is sustainable, based on consideration of both resource and financial aspects.
- On average, the change in Nelson's climate will remain relatively consistent for the next decade, with the likelihood of more severe and frequent extreme weather events continuing to increase.
- Future resource consents for the existing sources of water supply and abstraction volumes will be granted.
- There will be reductions in water losses. • Water supply will continue to be funded from water charges and, consistent with Council's financial policies, most of the capital expenditure will be funded from borrowings.
- Council will provide education and promotion of the importance of water conservation; however the demand for water is expected to continue to be primarily managed through Council's water metering and charging system. • Existing treatment plant membranes will continue to operate satisfactorily.

### Risks:

Risks that are rated as high for the water supply activity are listed below alongside ways to address them:

- Lack of resources to complete indicative business cases, which can be addressed by outsourcing of some of this work to other staff and to consultants.
- Failure to comply with resource consents. Methods to avoid this risk include having processes in place for compliance and reporting; independent contractor monitoring and reporting; installing alarm systems and water level indicators; and completing external audits.
- Communication risks include public misinformation about the performance of water systems, which can be managed by good messaging through Council's communication channels and responding to unscheduled requests.
- People risks include lack of staff with sufficient experience. The main ways to manage this are through recruitment decisions and employment conditions. A risk of contractors not meeting health and safety standards can be managed with reporting and auditing systems.
- Contamination of water within the water supply network is a risk which can be managed with backflow prevention devices and annual testing of these devices, development of a network contamination response plan, and an inspection and maintenance programme.
- Compromise of the water treatment plant to provide potable water to the city is a risk which can be managed with physical security, a backup generator, stockpiling chemicals and by having contingency plans in place.
- Climate change risks, including sea level rise, can be managed through resilience/adaptation programmes, developing solutions to minimise the risk of failure due to a natural hazard event. Significant negative effects Water takes, and discharges from the Maitai Dam, can impact on water quality and quantity, and aquatic health in the Maitai River. Intended changes to the level of service

## **Wastewater**

### Challenges:

#### **The location of the NWWTP**

The current NWWTP is located next to the Boulder Bank, so in the long term it may be affected by sea level rise and freshwater flooding.

While we expect to continue operating from the current location in the medium term, we are considering the climate change-related risks for treating wastewater in this location. We are also looking at alternative options for treatment of Nelson's wastewater over the longer term with the aim of ultimately moving away from water-based discharge so will explore land-based discharge options.

#### **Natural hazards**

Council has recently undertaken a Three Waters Natural Hazards study to understand which of our critical assets are likely to be exposed to specific natural hazard events. The next step is to work out how to increase the resilience of the most important and vulnerable assets.

#### **The need to maintain, renew and upgrade the wastewater assets**

A significant portion of Nelson's wastewater infrastructure was installed during the 1950s–1970s as part of a surge in urban development. This infrastructure is now 60–70 years old and approaching the end of its useful life. This means replacement of these assets will be required from the mid-2030s onward, creating an increase in work and funding required.

Some of these assets will be renewed early (coinciding with upgrades to other assets in the same location) and some replacements will be delayed if our assessments show our pipes are in a better condition than anticipated.

General pipe renewals will reduce to approximately \$0.5 million per year for the first three years of the Long Term Plan as work on other renewal projects such as Bridge Street and the Atawhai Rising Main increases. Council will increase spending on pipe renewals from 2027/28 (from approximately \$0.5 million in 2024/25 to more than \$3 million in 2033/34) and then maintain this level of spending over a period of time. This steady approach will encourage efficiency and provide a degree of certainty to the contractors who are doing the work

#### **Wastewater overflows**

Wastewater overflows are most likely to happen during wet weather, when stormwater or groundwater flows into the wastewater. Stormwater can get into the sewer network through manhole lids, low gully traps, and in crossed connections between stormwater pipes and sewer pipes. Groundwater can also get into sewer pipes through cracks in the pipes, failed joints, broken pipes, poor lateral connections and through manholes and pump stations.

The Ministry for the Environment proposes to develop a National Environmental Standard – Wastewater to provide guidance on managing these wastewater overflows.

Council has also begun work on improving its understanding of how the wastewater network performs and where there are capacity constraints, using computer modelling. This will support better decision making and investment to reduce wastewater overflows.

Part of the solution to limiting wastewater overflows is to upgrade the system downstream (to carry flow away from areas prone to overflows) and/or provide storage to minimise overflows. We also need to investigate high E.coli readings in water samples and repair any damage in the public network with urgency.

The issue of broken or misconnected pipes (stormwater pipes connected to the wastewater network) on private property is another challenge for Council and will be the subject of ongoing educational efforts.

#### **Atawhai Rising Main**

Failures of the Atawhai Rising Main are occasionally causing untreated wastewater discharges directly into the Nelson Haven.

The Atawhai Rising Main is a pressured pipeline (rising main) which transports wastewater from Nelson city (Neale Park) to the NWWTP near Wakapuaka. It is a high value and fragile asset that needs to be replaced soon because the inside of the concrete pipe is being impacted by the presence of sulphuric acid.

The full pipeline was inspected and sections were repaired or replaced with more durable material in the early 1990s. However, further failures have occasionally caused small volumes of untreated wastewater to directly discharge into the Haven. These discharges impact on coastal water quality, cultural values, and public perceptions of the quality of the environment. They also have the potential to affect Council's compliance with future resource consent conditions.

Construction of the replacement pipe is subject to obtaining resource consents and is scheduled to begin in 2026/27.

#### **Growth and intensification**

Management of increased wastewater flows needs to meet the needs of future urban intensification and growth.

Council has planned for 11,500 new dwellings in Nelson over the next 30 years, with 78% of this growth expected to be achieved by building more houses in existing urban areas, and the remaining 22% to be built in new areas (greenfield development).

As development decisions are made by private investors, future wastewater infrastructure development will need to be flexible to match provision of wastewater services with the location of new houses. We will use our computer modelling to understand where and when to invest in network renewals, upgrades and storage.

## Assumptions:

In addition to general forecasting assumptions that apply to all of Council's work, the following specific assumptions apply to the wastewater activity:

- The typical useful lives from the NZ Infrastructure Asset Valuation and Depreciation Guidelines – Version 1.0 have been used as a guide in determining base lives, with variations if needed to reflect local experience (such as the shorter life of the Atawhai rising main).
- Where an asset has exceeded its nominated base life, and is shown to be in good condition, a residual life of five years is assumed.
- On average, the change in Nelson's climate will remain relatively consistent for the next decade, with the likelihood of more severe and frequent extreme weather events continuing to increase.
- Wastewater activities will continue to be funded from wastewater charges, and most capital expenditure will be borrowed. Development contributions will fund the increased provision of services related to population growth.
- Wastewater treatment facilities to the North and West of the city will remain the most effective, efficient and cost effective means of disposing of wastewater. A philosophy of smoothing out the renewal's "surge" will be employed. This will involve early replacement for some assets and later replacement for others.

## Risks:

Many of the risks (and responses to these risks) for the wastewater activity are the same as the water supply activity, such as lack of resources to complete indicative business cases, communication risks (public misinformation and unscheduled requests), lack of staff with sufficient experience, contractors not meeting health and safety standards, failure to comply with resource consents, and climate change/sea level rise.

Additional risks which are specific to wastewater activity includes:

- Failure to achieve consent conditions at the NWWTP, which can be managed through chemical storage monitoring pond performance, pre-treatment processes, desludging, rapid responses to potential breaches, and ongoing investment in the pond management team.
- Failure of the Atawhai Rising Main. The primary response is construction of the replacement main starting in 2026/27. In the interim, this risk can be managed by stocking spare materials for rapid repairs, having systems in place for reporting and responding to issues, assessing the internal and external condition of the main, and running exercises to practise responding to a failure of the main.
- Failure of pump stations, which can be managed with duplication of pumps or alarm systems, as well as additional storage capacity, stocking spares of critical equipment, and running exercises to practise responding to a failure of critical pump stations.
- Insufficient storage capacity at pump stations, which can be managed with high level and overflow alarms, high-capacity pumps for peak conditions, and further work to build storage capacity.

## **Stormwater**

### Challenges:

#### **Climate change**

The level of service provided by existing stormwater assets will progressively reduce over time as we experience more intense storms and sea level rise.

Decades of development on flood plains adjacent to urban watercourses means the city has a considerable investment in these areas. We need to both reduce risks for existing development and ensure any new development in these areas is built to be resilient to flooding, with raised building platforms and/or floor levels.

Many stormwater flow paths are on private property and will carry stormwater during significant storm events. These pathways need to be identified and landowners made aware of the importance of keeping them clear so as not to cause damage to their property and downstream properties during heavy rainfall.

#### **Natural hazards**

An assessment of natural hazard risk to Nelson stormwater assets has defined the areas which are potentially subject to natural hazards and rated the criticality of the assets.

The severe weather event in August 2022 resulted in multiple landslips across the city, and a significant number of stormwater intakes overflowed due to debris blockages. This has led to a review of our stormwater intake capacity – which are the sites where stormwater enters pipes and waterways. Prioritising ‘resilience works’ will lead to network upgrades which focus on the stormwater intakes, detention basins, pump stations, and the piped network in specific areas of the city.

Our larger stormwater detention dams also need to be classified and managed to meet new Dam safety requirements.

#### **The need to maintain, renew and upgrade the stormwater assets**

An immediate priority is the implementation of the August 2022 Flood Recovery Programme and completion of upgrades and renewals in York Terrace, Bridge Street, St Vincent Street and in the Tāhunanui Slump catchments.

We also need a more strategic approach to identifying and responding to stormwater requirements across the city. Following on from the Stoke Stormwater Strategy, funding was allocated in the Long Term Plan 2021-31 for additional stormwater strategies (or catchment management plans) to cover Tāhunanui, Port Hills, Central Nelson and Atawhai.

Council is developing a Stormwater Renewal Strategy to manage the replacement of existing stormwater pipes from 2050s onwards, and to identify any renewals which need to happen sooner due to poor condition. New funding has been established for renewal of detention basins, as the number of these is increasing rapidly to service areas of urban growth.

#### **Meeting new freshwater quality objectives and standards**

Significant improvements to stormwater quality are likely to be needed to meet freshwater requirements related to macroinvertebrates, E.coli, water temperature, water clarity, and phosphorous levels. Nitrogen levels also need to be addressed at specific sites.

Reducing contaminants from stormwater runoff from roads will be particularly important.

#### **Management of increased stormwater flows associated with urban intensification and growth**

Council is planning for about 11,500 new dwellings in Nelson over the next 30 years, with 78% of this growth to be achieved by adding new houses in existing urban areas, and the remaining 22% expected to be in new (greenfield) areas.

Stormwater disposal options for these new developments range from low impact disposal to land (infiltration), detention (onsite tanks or larger ponds) and public drains. No single response is going to be able to be applied across the whole city given the need for freshwater quality improvements and the cost of constructing conventional piped drainage networks. Any upgrading of the public network undertaken to support growth areas will, where possible, be co-ordinated with other utility upgrades in the same area.

#### **Assumptions:**

In addition to general forecasting assumptions that apply to all of Council’s work, the following specific assumptions apply to the stormwater activity:

- The typical useful lives from the New Zealand Infrastructure Asset Valuation and Depreciation Guidelines can be used to guide how long assets will last, combined with local experience.
- Where an asset has exceeded its nominated base life, a residual life of five years is assumed. • The most efficient, equitable, safe and costeffective means of disposing of stormwater is a council-provided system for the Nelson urban area.
- Stormwater reticulation will be designed for a storm event that has a probability of occurring on average once every 15 years (a Q15 event), and that takes into account the impacts of warming climate and more intense rainfall up to the year 2090.
- No new legislation will be imposed during the next decade to require a higher level of service for stormwater reticulation than for the Q15 event described above.
- A storm event with a 2% probability of occurring in any one year (a Q50 rainfall event) would very likely cause major flood damage, which would have to be managed by emergency management systems, and insurance.
- No significant effects on stormwater structures are expected within the next 10 years from climate change-induced sea level rise (however, these effects are expected to arise in the longer term).

Risks:

Many of the risks (and responses to these risks) for stormwater are the same as for the water supply activity, such as lack of resources to complete indicative business cases, communication risks (public misinformation and unscheduled requests), lack of staff with sufficient experience, contractors not meeting health and safety standards, failure to comply with resource consents, and climate change/sea level rise.

Medium level risks which are specific to stormwater activities include:

- A flood event where reticulation or an open channel has insufficient capacity to deal with rainfall which is larger than a Q15 event. Ways to manage this are to inspect and maintain existing capacity, respond to emergencies as they occur and fix damage after events, or upgrade sections to improve capacity (based on the assessed risk).
- Flooding occurs after an accumulation of debris creates blockages to existing channels. Ways to manage this include carrying out regular inspections and maintenance of drains and waterways as well as culverts, intakes and outfalls, and responding to emergencies as they occur.
- A flood event coinciding with high tide. Ways to manage this include responding to emergencies as they occur, using stormwater pumping systems in Tāhunanui and The Wood, and through insurance.
- Earthquake risks to stormwater assets can be managed through emergency responses followed by repairs to the assets, regular inspections and maintenance, and proactive works to increase resilience to slope instability and earthquake impacts, particularly liquefaction.
- Stormwater discharges fail to meet water quality standards. This risk can be managed through the stormwater quality improvements, capital investments in stormwater treatment infrastructure, and monitoring to evaluate the impacts of interventions.

**Appendix E: Water Supply Activity Management Plan 2024 – 2034 Projects for Growth Areas.**

**Water Supply Infrastructure Upgrade Programme for Future Development Strategy Sites.**

Development Area	Approx. yield (dwellings)	Proposed Network Upgrade	Year	Expected Cost for services renewal and upgrading
<b>URBAN NELSON INTENSIFICATION GROWTH AREAS</b>				
City Centre South N-107	285	IAF Bridge St, Collingwood St, Halifax St, Rutherford St		\$11.4M
City Centre North N-108	200			
Victory N-23	250	Upgrade trunkmain from CBD and install ringmain	TBA	\$2.75M \$.5M

		Toi Toi St Ridermain	2031 - 2033	
Hospital/Nelson South N-22	250	Upgrade trunkmain from CBD and install ringmain	TBA	\$8.3M
Waimea Road North N-21	80	Upgrade trunkmain from CBD and install ringmain	TBA	\$2.8M
Stoke School (and surrounds) N-28	215	Upgrade trunkmain from Songer Street and install ringmain	TBA	\$4.25M
The Brook N-289	280	Upgrade reticulation as required	TBA	\$750,000
Washington Valley South N-287	45	Renew and Upgrade reticulation	2024 - 2032	\$6M
Marlowe Street (and surrounds) N-101	230	Nayland Rd – Aldinga to Songer	2024	\$.2M
<b>URBAN NELSON GREENFIELD GROWTH AREAS</b>				
Saxton N-11	900	Suffolk Road (Saxton to Ngawhatu) water upgrade  NCC – TDC Link	2031 – 2033	\$.3M
Griffin Site N-100	265		2028 - 2032	\$3.86M
Maitahi/Bayview N-106	900	Maitahi & Bayview Development Growth Projects:  Install trunkmain from Tasman Street and construct reservoir	2024 - 2031	\$8.36M
Marsden and Ngawhatu N-111	2,150	Ngawhatu high level reservoir	2026 - 2030	\$2.9M

<b>RESIDENTIAL INFILL POTENTIAL</b>				
Nelson North (e.g. Atawhai, Marybank)	605	Atawhai Reservoir & pump	2028 - 2032	\$1.9M
<b>ADDITIONAL GENERAL BUDGETED PROJECTS</b>				
Future growth and Intensification Projects			2024 - 2033	\$8.2M
General Network upgrades: PRV renewal valves SCADA electrical, water pump station upgrades, water treatment plant upgrades			2024 - 2033	\$5M

Reference: Table 3-7 Water Supply Activity Management Plan 2024 - 2034