

Strategic Case

The strategic case sets out a case for change, problem definition, investment objectives and critical success factors.

Conclusions from the strategic case

In order for the Hawke’s Bay region to thrive it is critical that core infrastructure and basic services are provided to all residents in the region at an affordable cost. Given that the Councils face the same or substantially the same issues, then addressing this challenge in a coordinated way that eliminates duplication and ensures that all the Councils and their communities have access to the appropriate strategic capacity and capability to do so.

The strategic case highlights a number of challenges for the region with the current approach and in doing so it identifies the case for change. These challenges are both current and future. They are a challenge for all councils, but in particular for the smaller councils who do not have the resources to address these issues effectively.

- Increasing government regulations are driving requirements for significant future investment into three waters infrastructure. Councils originally forecast a combined \$313 million in capital investment in three waters in the 2018-2028 LTP, that has been revised to \$388 million. Taking into account the expected change in regulatory standards we estimate that to now be \$605 million.
- an increasing need to recognise the environmental impacts and use of water generally by the communities and the role required of the three waters services to mitigate these impacts
- While the engagement with the Māori committees and the chairs of the Māori committees was focussed on the future of service delivery for three waters, it quickly highlighted issues for Māori with the current approach. While those are addressed in the cultural case, they are also reflected in the investment objectives. Issues were identified around the need to recognise Treaty of Waitangi partnership obligations and that the current approach does not sufficiently provide for Māori to participate in decision making.
- A shortage of specialist resources for three waters across New Zealand and internationally. Hawke’s Bay’s councils are already finding it difficult to fill certain roles and attract the skills they need. Councils compete with each other for talent and the smaller councils require people who must be able to cover a broad range of duties aside from their specialist area

Affordability of three waters services is identified as a key issue. There is currently a stark difference between the cost of the three waters services in the cities and the rural councils.

Table 4 Comparison of cost of service

	Central Hawke’s Bay	Hastings	Napier	Wairoa
Average three waters residential rate - now ⁷	\$1,664	\$759	\$686	\$1,123

⁷ Based on sum of average weighted residential rate from funding impact statements (2018/19 Annual Plans). Exclusive of GST

The rates disparity between rural and urban councils that is already evident, is set to worsen over the coming years. Councils are already forecasting increasing costs to meet new standards and stronger regulation of the provision of water services, and there are many more costs that councils have not yet had the opportunity for forecast. While this will impact all communities, it most obviously affects Wairoa and Central Hawke’s Bay where there is a smaller number of ratepayers over which to spread the costs.

There are a range of international benchmarks for what is considered affordable for water and wastewater services. Water NZ has previously referred to these as ranging from 2% to 5% of household income. The table below shows that Wairoa and Central Hawke’s Bay already exceed the low benchmark of 2%, and by 2032 Wairoa is projected to exceed the highest benchmark.

Table 5 Comparison of affordability of service

	Central Hawke’s Bay	Hastings	Napier	Wairoa
Affordability of water and wastewater - now	2.7%	1.1%	1%	2.1%
Affordability of water and wastewater - projected	4.4%	1.9%	1.5%	5.9%

Investment objectives

The investment objectives were developed through workshops with council staff and Māori committees and a review of the current state and take into account Section 17A assessment criteria.

These were then discussed and confirmed following the options assessment workshop with representatives from the four territorial authorities and the Hawke’s Bay Regional Council.

The principles developed through engagement with the Māori committees are discussed in the cultural case, but they have been shown here to show the link between the investment objectives and the principles.

Figure 9 Investment objectives

To provide three water services in a way that is affordable and effective		The three waters service's model must address the challenge of providing for an effective, affordable service in a fiscally responsible way
To provide services that are safe, reliable and resilient		Access to safe and reliable three waters service are fundamental to all the urban and rural communities of Hawke's Bay
To provide services through a model that enables a meaningful role for Māori		The Local Government Act requires a local authority to provide opportunities for Māori to contribute to its decision making processes
To provide services through a model that has the value of water at the centre		Water is vital to community life and as such three water services are part of a holistic water system
To provide three waters services in a way that supports our urban and rural communities		The services influence how people across Hawke's Bay live, work, gather, socialise, recreate and value environmental amenity
To provide three waters services that build enduring capability and capacity		The three waters model must be capable of, and have the capacity to, deliver quality sustainable planning, management and operation of three water services now and into the future

Figure 10 Principles

Value Te Ao Māori	Incorporating and implementing mātauranga Māori, culture and values (i.e. Te Aranga Design Principles) are a core element for any potential framework to realise and enhance the region's commitment to Māori to protecting/enhancing water
Value water	Wai is the essence of all life and the world's most precious resource. It is of high importance to Māori, as it is the life giver of all things, a precious taonga, part of our whakapapa
Whakapapa – genealogical links	Recognise and respect the relationship and whakapapa (genealogical link) that mana whenua has with water.
Te mauri o te wai – the life force of water	Mauri is the integrated and holistic well-being and life support capacity of water. The well-being/healthiness of the water, the land and the people are intrinsically connected.
Holistic approach to water	Although the project is based around the review of the service and delivery of the three waters (infrastructure), the proposed model needs to take into account a holistic water approach: there is only one water.
Enabling of Te Tiriti o Waitangi	Involving mana whenua in governance and decision making required to ensure Te tiriti o Waitangi obligations are met, as well as making sure they are able to actively exercise kaitiakitanga in a practical way
Mana motuhake - identity, self-determination	The identity of mana whenua in Hawke's Bay should not be lost in any potential model. But inclusion and co-governance whilst keeping their identity is an opportunity

These investment objectives were then used to assess the options against as part of the long list assessment and then also the short list. They are explained below with reference to what these mean in the context of Hawke's Bay.

Investment objectives explained

To provide three water services in a way that is affordable and effective

Asset management plans and financial forecasts have identified that substantial capital investment is required either to support existing communities or to facilitate and sustain the growth occurring within the region. The three waters services model must address the challenge of providing for an effective, affordable service in a fiscally responsible way. In doing that we must consider not only the current costs of the services but also consider the future costs as they are known and quantified within the Councils' long-term plans. We must also consider the future infrastructure costs which the Councils have not yet quantified but are aware of as well as the capital and operational costs which are expected to come as a result of the Government's three waters reform.

Underpinning everything is the purpose of local government as set out in the Local Government Act: the provision of efficient and effective services.

To provide services that are safe, reliable and resilient

Access to safe and reliable three waters services are fundamental to all the urban and rural communities of Hawke's Bay. There is a particularly heightened sensitivity and understanding of what's required within Hawke's Bay as a result of the Havelock North contamination event in 2016. Stormwater disposal is a significant issue within the region. Three waters services are a core service for councils under the Local Government Act and they must meet health and environmental standards in delivering key public health services. The Government's three waters reform agenda is anticipated to significantly increase environmental standards and compliance requirements for all councils. The three waters services' model must deliver quality, compliant services that are resilient and sustainable both now and in the future. Resilience requires consideration of much more than the infrastructure. While understanding and acknowledging the challenges of the natural disasters that Hawke's Bay is at risk of facing, there is a need for the three waters system to be resilient; that includes the human resources, infrastructure and financial capacity.

To provide services through a model that enables a meaningful role for Māori

The principles contained within the Local Government Act require a local authority to provide opportunities for Māori to contribute to its decision-making processes. The development of any model must be cognisant of the importance of providing a meaningful role for Māori. Māori culture and values have always placed a high importance on water. An example of that is that Te Awa Tupua now has the legal status of a person⁸. Marae have always been established close to water, and the rivers, harbours and sea have always been a source of food. This is particularly evident in Hawke's Bay. Water is central to Māori culture: water is taonga, respecting water, the way water is used and the impact of human life on water and the life it sustains.

8

S14(1) of the Te Awa Tupua (Wanganui River Claims Settlement Act 2017



To provide services through a model that has the value of water at the centre

Water is vital to community life and as such water services are part of a holistic water system, not only within Hawke's Bay but across New Zealand. The communities of Hawke's Bay are deeply connected to their water (lakes, rivers and harbours) and they place significant importance on the use, health, quality and protection of future use of that water. Water crosses communities and is not constrained by local or regional boundaries, as such each community's decisions can affect its neighbours. Similarly, there are sometimes competing interests for the same resources within a council area and within the wider Hawke's Bay. Safe and secure water supplies, drainage and sewerage treatment are identified by most individuals as a top priority for the region.

A different example of the value of water to communities is the issue of chlorination of drinking water. Some communities, or parts of communities in New Zealand place a high value on having un-chlorinated drinking water. This is a significant issue for some communities in Hawke's Bay right now where currently all council supplies are being chlorinated.

The Government's reform of drinking water will introduce mandatory disinfection of water supplies (i.e. chlorination) with suppliers able to seek exemptions where they can demonstrate to the regulator's satisfaction that all risks to water safety are being managed appropriately. Essentially, this allows communities to seek and receive a different service level than the standard service level of chlorination. A successful three waters service delivery model must have processes that enable engagement with communities on issues such as this and where support exists be capable of meeting the relevant level of service, even where that might be higher than for the remainder of the area.

Water has cultural significance for Māori and models should be able to incorporate Te Ao Māori, kaitiakitanga and implement mātauranga Māori. Designing in Māori principles and values into projects and infrastructure is emerging across New Zealand and needs to be able to be reflected in the operations of a service delivery model. To be successful, the service delivery model for three waters will recognise all of these different values of water.



To provide three waters services in a way that supports our urban and rural communities

Three waters services and the people that form part of those services are deeply linked in the communities of Hawke's Bay. The services influence how people live, work, gather, socialise, recreate and value environmental amenity. The three waters are a crucial element of the local economy, providing direct employment, facilitating business establishment and growth, and as such are essential to community place making. Local employment and growth are priorities for all the communities of Hawke's Bay. The direct impacts as well as flow-on impacts of change in service delivery models for these communities need to be considered. It is also important for small communities to feel listened to and represented by the service delivery model. All of these must be balanced against the benefits that may arise for these communities with improved services and affordability.



To provide three waters services that build enduring capability and capacity

The three waters model must be capable of, and have the capacity to, deliver quality sustainable planning, management and operation of water services that is consistent with the wider regional strategic objectives. This will continue to require skills beyond traditional service delivery functions and include a wider appreciation of stakeholder view and expectations. Attracting and retaining strategic capacity and capability in the three waters workforce itself is a key challenge for the Hawke's Bay councils. Strategic capacity is important to ensure good long-term asset investment decisions are made.

Water NZ found that nationally, total vacancies in the water industry were at nearly 10% “confirming staff attraction and remains a pressing industry need. Efforts to attract and retain staff into the water sector require concerted effort”. That was before the creation of Taumata Arowai which will further draw on the scarce resources nationally.

Creating and holding that capability and capacity over the medium and longer term will be a challenge. This challenge is not unique to Hawke’s Bay.

Critical success factors

The long list of options was also assessed against critical success factors. The long list is set out in **Appendix E**. These critical success factors are considered standard for Better Business Case analysis:

- Strategic fit and business needs
- Potential value for money
- Supplier capacity and capability
- Potential affordability
- Potential achievability

Current state of three waters services and service delivery

Background

Three waters services are the responsibility of local government. The provision of drinking water, treatment and disposal of wastewater and management of stormwater are critical services to the health of our communities and their social, cultural, economic and environmental well-being.

Section 130 of the Local Government Act 2002 sets out a requirement for councils who provide three water services “to continue to provide services” and maintain “capacity to meet its obligations”. There are numerous legislative obligations, requirements and controls that go beyond the Local Government Act in the provision of these services, including requirements under the Health Act 1956, Building Act 2004 and the Resource Management Act 1991.

What is of particular relevance for the purposes of this review is the obligation on councils to provide the services, maintain their capacity to do so and restrictions which prevent the divestment of the three waters assets (except to another local government organisation) and the use of the assets as security. Effectively this creates an enduring obligation to provide three waters services. It is not a service that the Councils can opt out of, and with the significant public health implications of the services, there is an ongoing substantial need for investment and resourcing.

The Government is currently reviewing how three waters services are delivered across New Zealand. In a Cabinet paper released on 20 November 2018, the Government indicated that alongside regulatory changes there may be major structural reform of the water sector. That reform programme took a significant step forward with the July 2020 announcement and introduction of \$761M of funding to facilitate regional and multi-regional discussions about aggregation.

The 2018 Cabinet paper described a system facing significant issues where “the scale of the challenge indicates that the status quo is not sustainable in the long term”. Among the key issues identified were weak regulation, capability challenges (particularly for smaller councils), funding and financing issues for upgrading infrastructure, where the Government stated, “for many smaller councils, there is no clear way forward given the scale of the challenges”.

Hawke's Bay has been a focal point for the three waters discussion due to the 2016 Havelock North water contamination event. Following this, the Councils have collectively worked together to respond to recommendations arising from the inquiry into the event. The region is now one of the few that has joined together to engage with the Government on the issues identified by the November 2018 Cabinet paper.

In the first stage of this review, during early 2019, an assessment of the current state was undertaken (refer to **Appendix G**). Information was collected from each of the Councils and analysed for trends, issues, challenges and opportunities. This identified that at that time there were some major issues within the region for the three waters services. The biggest of these are affordability of future services and differences in strategic capability and capacity. These two issues come together in the smallest councils where there is a future requirement for infrastructure to be upgraded. This requires capacity and capability to plan and deliver the works but also the financial capacity of the community to pay for it on an ongoing basis.

Subsequent to the initial assessment of the 2019 current state, further and more detailed work was

- undertaken by WSP to look at regional asset value and condition alignment in **Appendix D**
- provided by each council with financial forecasts and asset expenditure projections from 2020
- undertaken by Morrison Low to understand the potential impacts on each council of the options for change.

The Councils

The four councils that provide three waters services in the Hawke's Bay are different but have many similarities. The most striking and obvious differences are their sizes and differences between rural and urban areas. Wairoa and Central Hawke's Bay are small councils by population. They are the 6th and 19th smallest councils in New Zealand respectively on that measure. When combined, the population within the council areas is comparable to Hamilton City but the nature of the areas is vastly different.

Napier City Council and Hastings District Council are roughly equivalent with approximately \$100 million operating revenue and over 400 employees. Central Hawke's Bay District Council and Wairoa District Council have revenue of \$27 million and \$21 million respectively and 50 - 60 employees. This is significant in the context of delivering three waters service and as noted later in the human resources section, results in employees having to cover a broad range of duties and act as generalists, not specialists. The population and rating base in the smaller councils also limits the funds available for capital works. The capital works budget (across all council activities) in Hastings District Council is over ten times larger than the capital works budget for Wairoa District Council. Napier is unique as a city council, with a significantly smaller land area and one population centre.

The differences between rural and urban areas is pronounced for the three waters services as shown in **Table 6**. It shows through in the number of different schemes for supplying water, treatment plants, kilometres of pipe network, reservoirs, extent of stormwater network and, because of the population density of Napier and to a lesser extent Hastings, proportionally fewer ratepayers and users of the three waters services to pay for the services.

Table 6 Territorial authority key statistics (2018) ⁹

	Central Hawke's Bay	Hastings	Napier	Wairoa
Land area	3,332 km ²	5,226km ²	105km ²	4,077km ²
Population ¹⁰	14,142	81,537	62,241	8,367
Council operating revenue (\$'000)	26,689	104,864	96,856	21,108
Council operating expenditure (\$'000)	31,745	114,707	98,808	25,592
Council capital expenditure (\$'000)	11,806	77,419	32,801	10,149
Council rates revenue (\$'000)	19,135	72,674	53,900	12,636
Median personal income ¹¹	\$29,000	\$28,400	\$28,900	\$22,600
Council employees	52	415	466	61

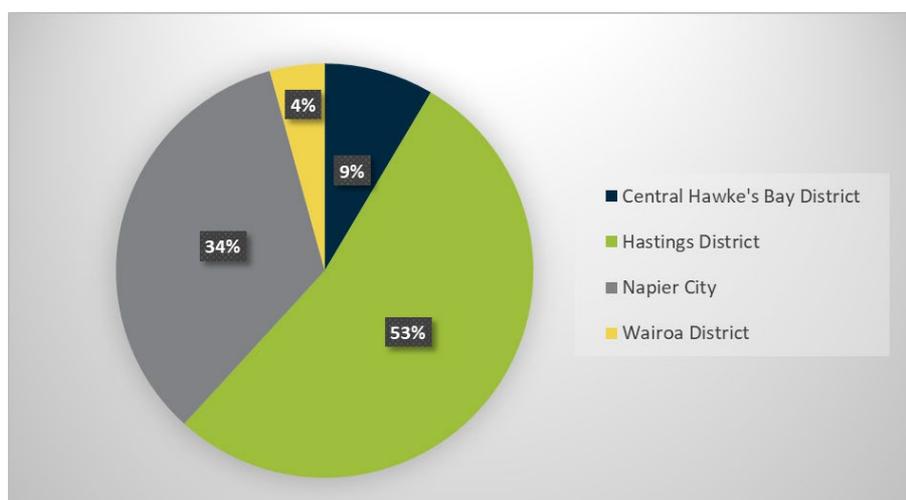
The three waters services are critical to the communities they serve. They link to almost all of the economic, social, cultural and environmental outcomes of the individual Councils. A summary of the customers is set out in **Table 7** below.

Table 7 Region wide summary of three water customers

	Water	Wastewater	Stormwater
No of service properties	56,218	55,490	52,068
Communities served	26	24	n/a

The relative value of the three waters assets by council area is shown below. Hastings has both a comparatively large population and their network covers a larger geographic area meaning that the value of their three water assets is the largest of the group.

Figure 11 Regional three waters assets replacement value (WSP)



⁹ www.localcouncils.govt.nz – Key financial statistics (2018)

¹⁰ Ibid

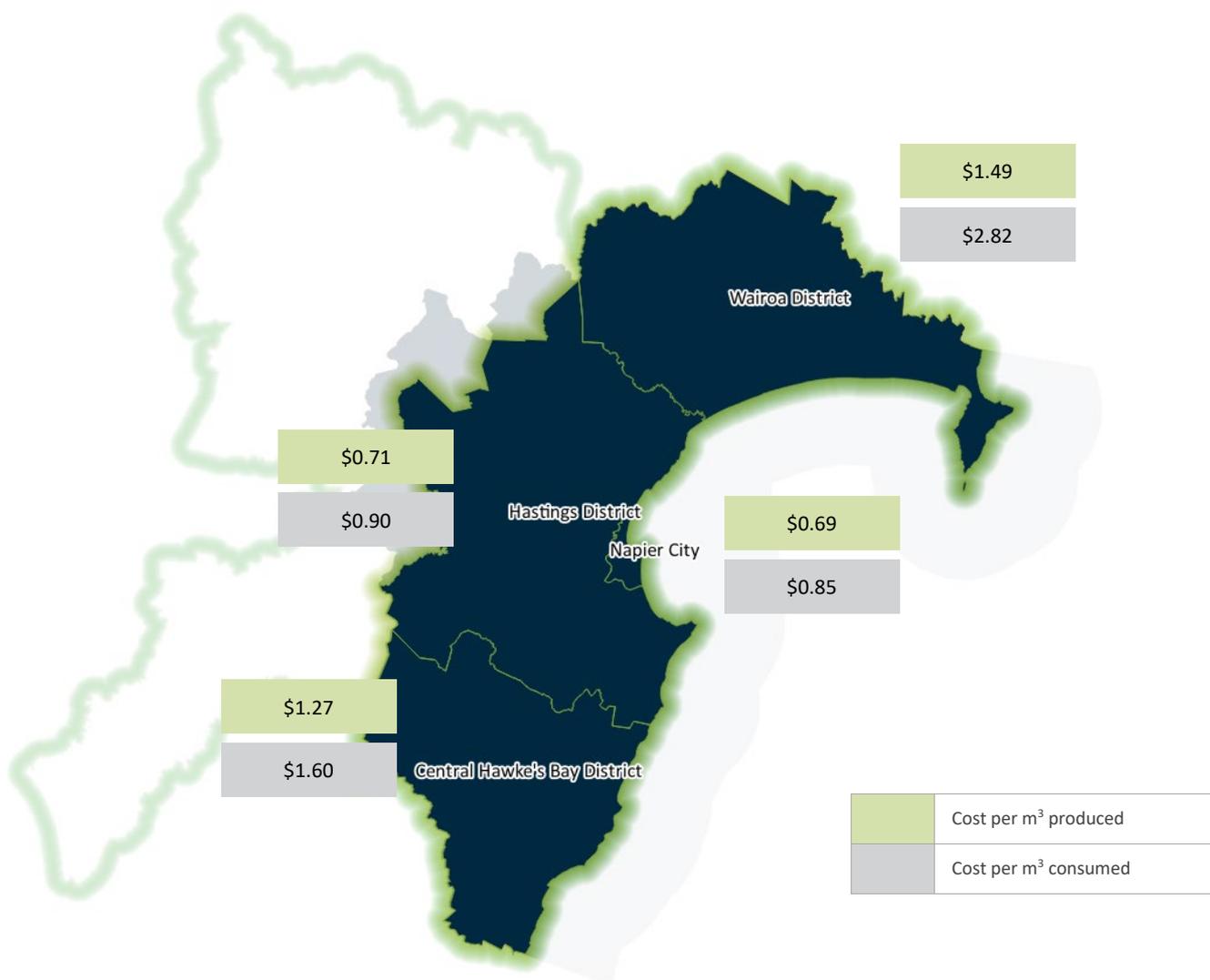
¹¹ Stats NZ 2018 Census data

Cost of service

There are already significant differences between the cost of the three waters services across the four councils as presented in **Figures 12** and **13**. The cost to produce and supply drinking water as well as the cost to treat wastewater is much higher in Central Hawke’s Bay and Wairoa than it is in Hastings and Napier.

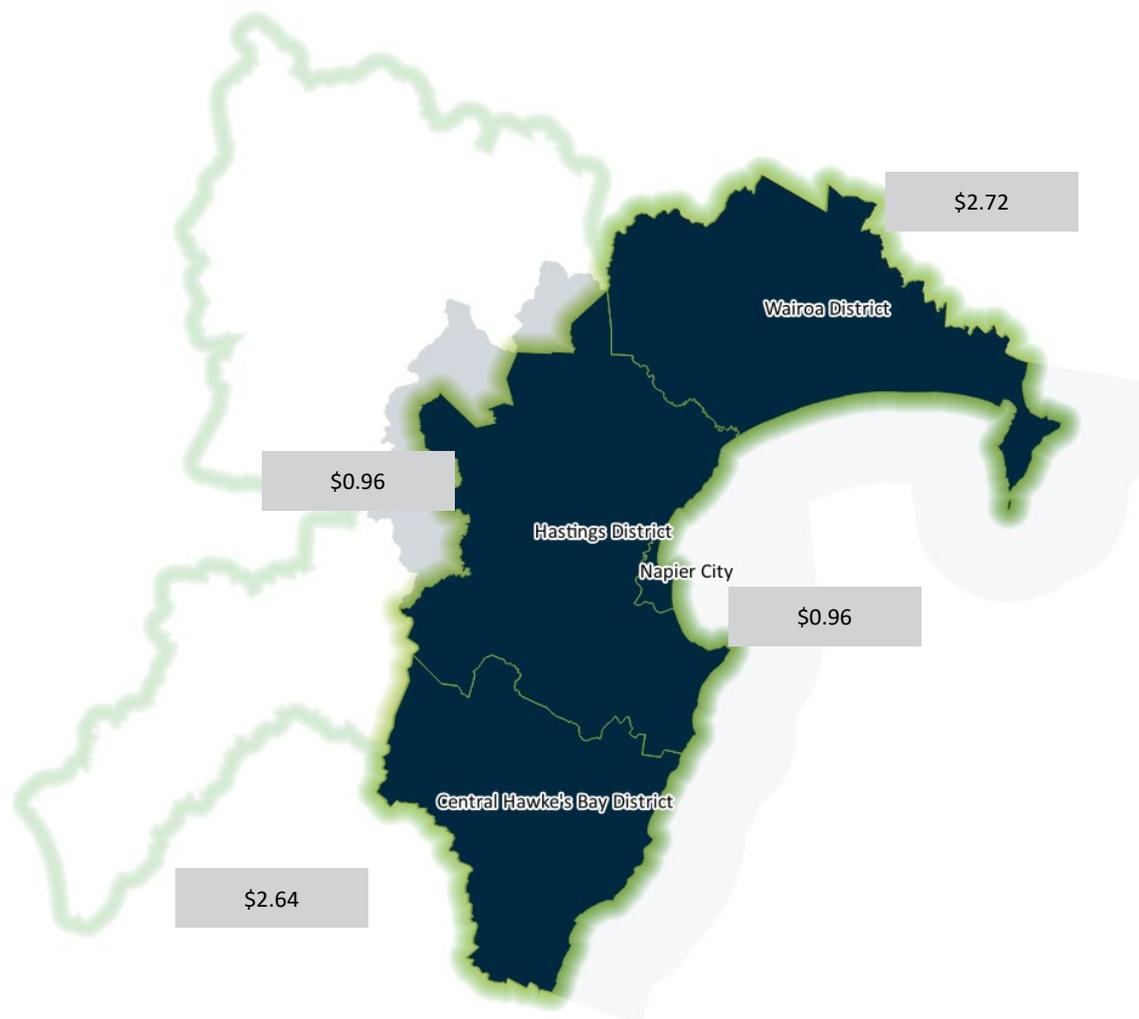
This can be explained by the differences in the systems and the population bases of each, but the key point is the disparity between the regions and the cities.

Figure 12 Cost¹² per cubic metre of water produced and consumed in Hawke’s Bay Region (2019)



¹² Total operating cost including depreciation divided by water produced/consumed

Figure 13 Cost¹³ per cubic metre of wastewater treated in Hawke’s Bay Region (2019)



There is a clear difference, not just in terms of the cost of the service but in what ratepayers pay for the services, between the large councils (Napier and Hastings) and the smaller rural councils (Wairoa and Central Hawke’s Bay). The average residential rate for three waters in Central Hawke’s Bay is more than double that in Hastings and Napier. Such big differences are not however unusual in New Zealand. The Water NZ Annual Performance Review 2018-19 found that

*“consumers are paying over three times as much (\$863/year versus \$262/year) in some areas as in others for water, and over ten times as much (\$1,217 versus \$116/year) for wastewater services. There was even higher variation in stormwater charges, which ranged by a factor of over 20, from \$18 to \$427 per year”*¹⁴

The 2017/18 Annual Performance Review, considered charges for the three waters services across the 46 organisations that participated that year and noted, *“this suggests that as the scale of drinking water and wastewater services increases, there are efficiencies of scale resulting in lower averages (sic) costs to consumers”*.

¹³ Total operating cost including depreciation divided by wastewater treated

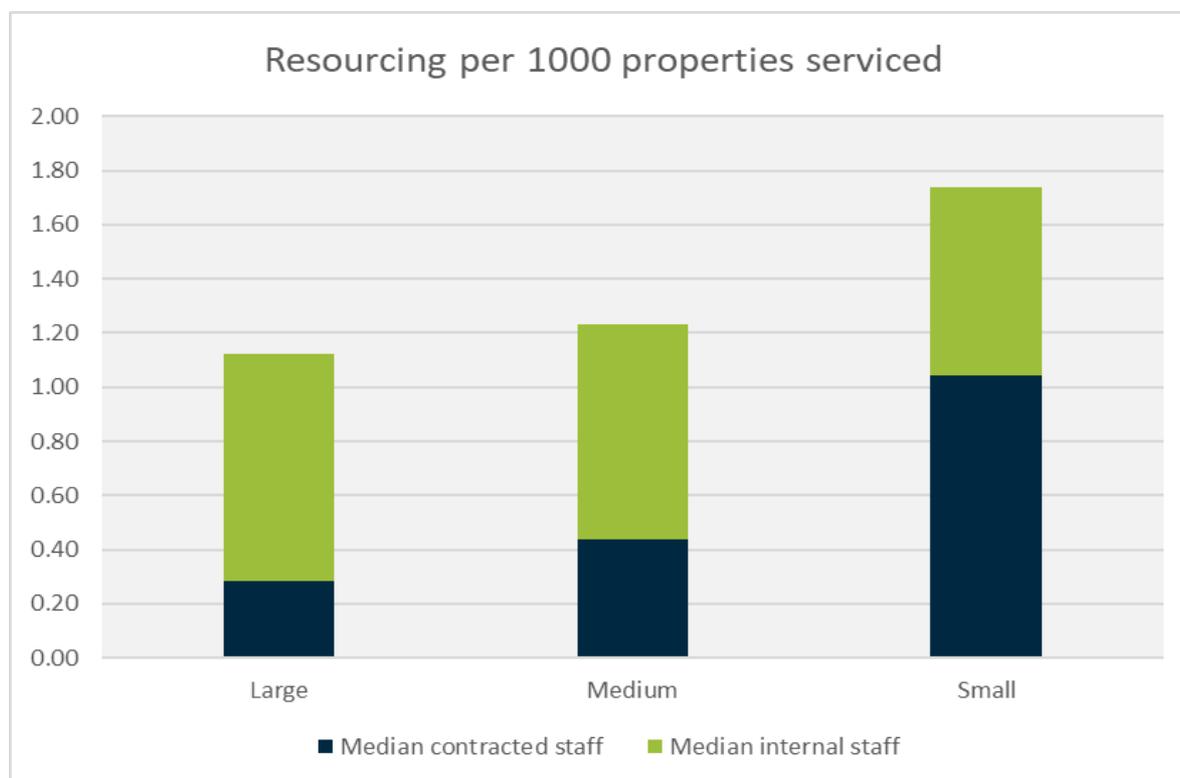
¹⁴ Page 39, 2018-19 Water NZ Annual Performance Review

The report highlighted two particular areas, where in their view this was evident – the number of employees per 1,000 properties services and the overall water/wastewater charges.

“Relative Water and wastewater charges are also co-related with scale, with customers of small entities paying median charges of \$1,057 a year, and customers of large participants paying \$723 a year”¹⁵

While a council to council comparison may be problematic the trend identified by Water New Zealand is relevant. The chart below is produced from the information within the 2018/19 Performance Review. It shows the same trend as the 2017/18 data. In 2018/19 the median staffing levels were 1.12 employees per 1,000 properties serviced with water and wastewater compared with a median staffing level of 1.74 for small entities.

Figure 14 Comparison of staffing levels (Data from Water NZ Annual Performance Review 2018/19)



We note that, based on the categorisation used by Water NZ, a combined Hawke’s Bay CCO would be considered a large water organisation.

In our review we have used a different comparison based on an average residential rate, yet we found the same trend. The average residential three waters rate for Napier and Hastings (both medium in the Water NZ benchmarking) was substantially less than for Central Hawke’s Bay and Wairoa (both small in the Water NZ benchmarking).

Affordability is not only related to the cost of the service but also the community that is paying. In the Water NZ 2017-18 National Performance Review it considered relative affordability of water and wastewater services. It referred to varying international water affordability metrics for water and wastewater services ranging from 2 - 5% of household income¹⁶. Analysis of the current level of affordability of water and wastewater in Hawke’s Bay shows a wide variation with both Central Hawke’s Bay and Wairoa above the lower range metric of 2% already.

¹⁵ Page 6, 2018-18 Water NZ Performance Review

¹⁶ 2018-18 National Performance Review, Page 7

Table 8 Comparison of current cost of service

	Central Hawke’s Bay	Hastings	Napier	Wairoa
Average three waters residential rate ¹⁷	\$1,664	\$759	\$686	\$1,123
Affordability of water and wastewater ¹⁸	2.7%	1.1%	1%	2.1%

Three water assets

Asset condition

There is a wide variation in the condition of the three waters assets across Hawke’s Bay. That in and of itself is not surprising and, given that each council has its own approach to condition assessment, care should be taken in direct comparisons between them. The 2019 current state assessment collected asset condition data from each Council. This showed that at the time Wairoa was unable to provide any condition data for the stormwater network. Highlighting this is not a criticism of Wairoa, it has been done to highlight the challenge faced by small councils across New Zealand who have limited resources, capability and capacity and are forced to make choices in the allocation of those scarce resources. We note that by the time of the 2020 *Regional review of asset condition* by WSP, Wairoa had the relevant data. However, WSP found

“Condition assessment approaches and data availability varies between the Councils with generally lower confidence than other valuation input data. Because of the significant variations in condition approach and data availability, a comparison is not possible based on raw condition data”.

All Councils are preparing for the 2021-2031 LTPs. This process includes reviewing asset management plans and forecast programs. Of which we understand that Napier is in the process of developing masterplans for its three waters networks and these will inform updated investment plans which may contain more infrastructure investment.

As new information is developed these updates could be expected to change the current reported condition and forecast expenditure.

The charts in this section show the asset condition for each of the water, wastewater and stormwater networks by reference to inferred condition based on remaining useful life.

Inferred condition based on remaining useful life – where condition data is unavailable it is typical to make an age-based determination of condition. Age has been used as a proxy for condition on the basis that as an asset gets closer to its expected lifespan, its condition will deteriorate. This approach is commonly used for municipal assets where condition data is not readily available. Asset age data has been used to calculate the Remaining Useful (RUL) (as a percentage) of the asset in accordance with the following formula

$$RUL(\%) = 1 - \left(\frac{\text{Assessment Year} - \text{Year Installed}}{\text{Adopted Useful Life}} \right) * 100$$

To support the reader to interpret the charts, they should note *Excellent* is rated as 1 and 5 is rated as *Very Poor*.

¹⁷ Based on sum of average weighted residential rate (GST exclusive) from funding impact statements (2018/19 Annual plans).

¹⁸ GST inclusive. As a percentage of household income. Relies on 2018 Census data for household income by Council area with Morrison Low projections of future values.

What is relevant in the next three charts is that based on information provided there is a trend is for the assets of Wairoa to be in a worse condition than the rest of the Councils. Hastings and Central Hawke's Bays assets are then generally reported as being in a better condition than Napier's.

Figure 15 Water pipes inferred condition based on remaining useful life (by value)

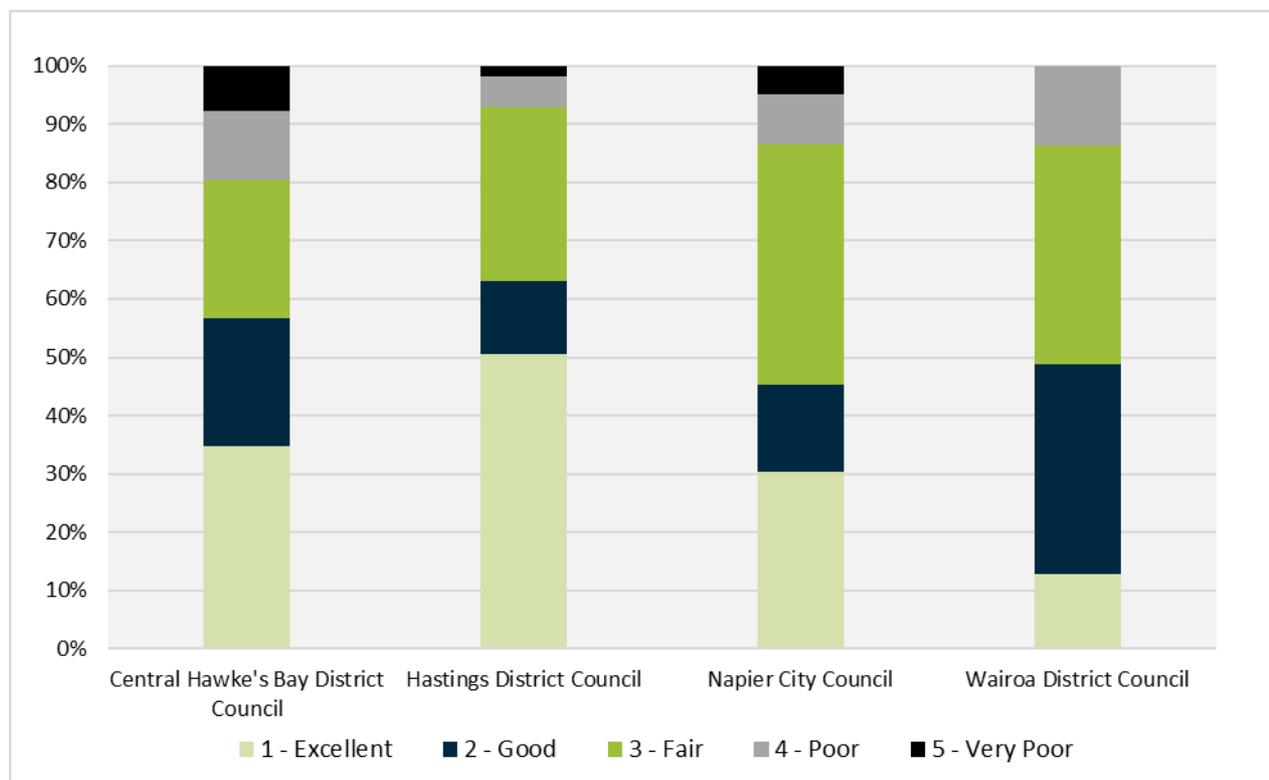


Figure 16 Wastewater pipes inferred condition based on remaining useful life (by replacement value)

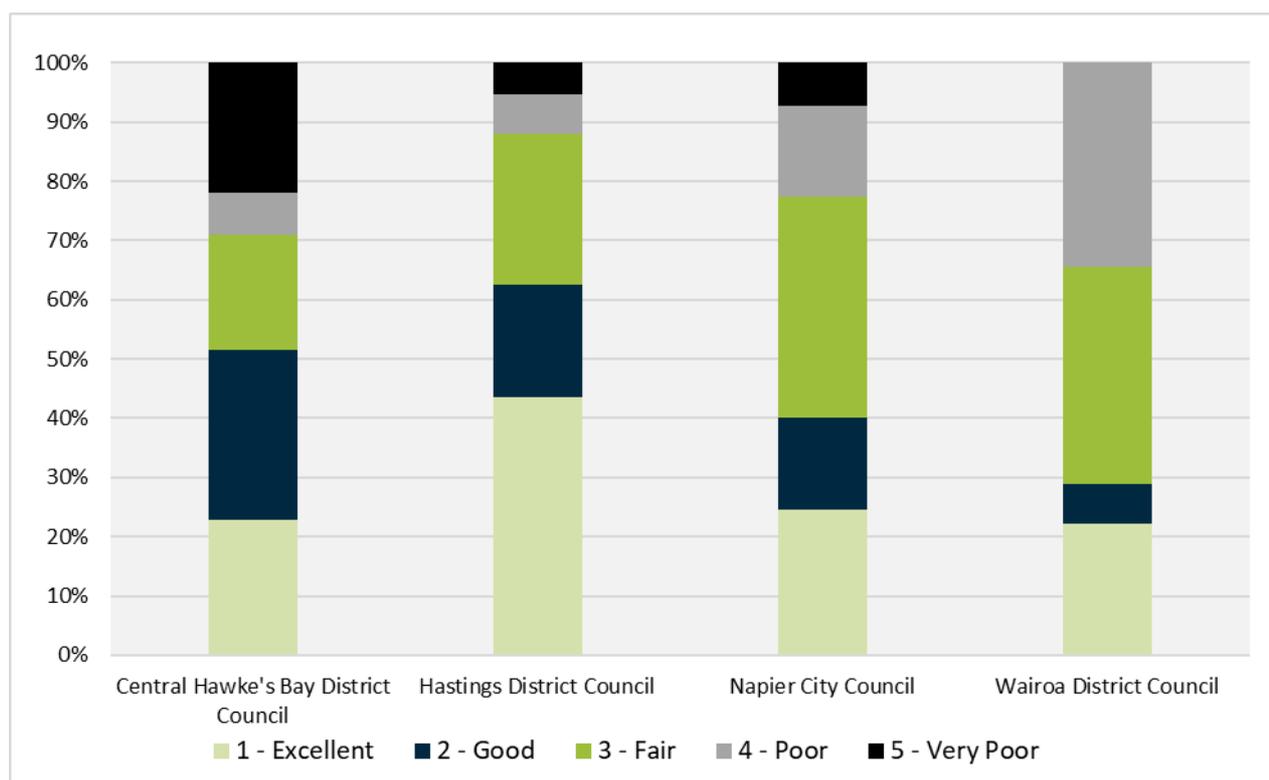
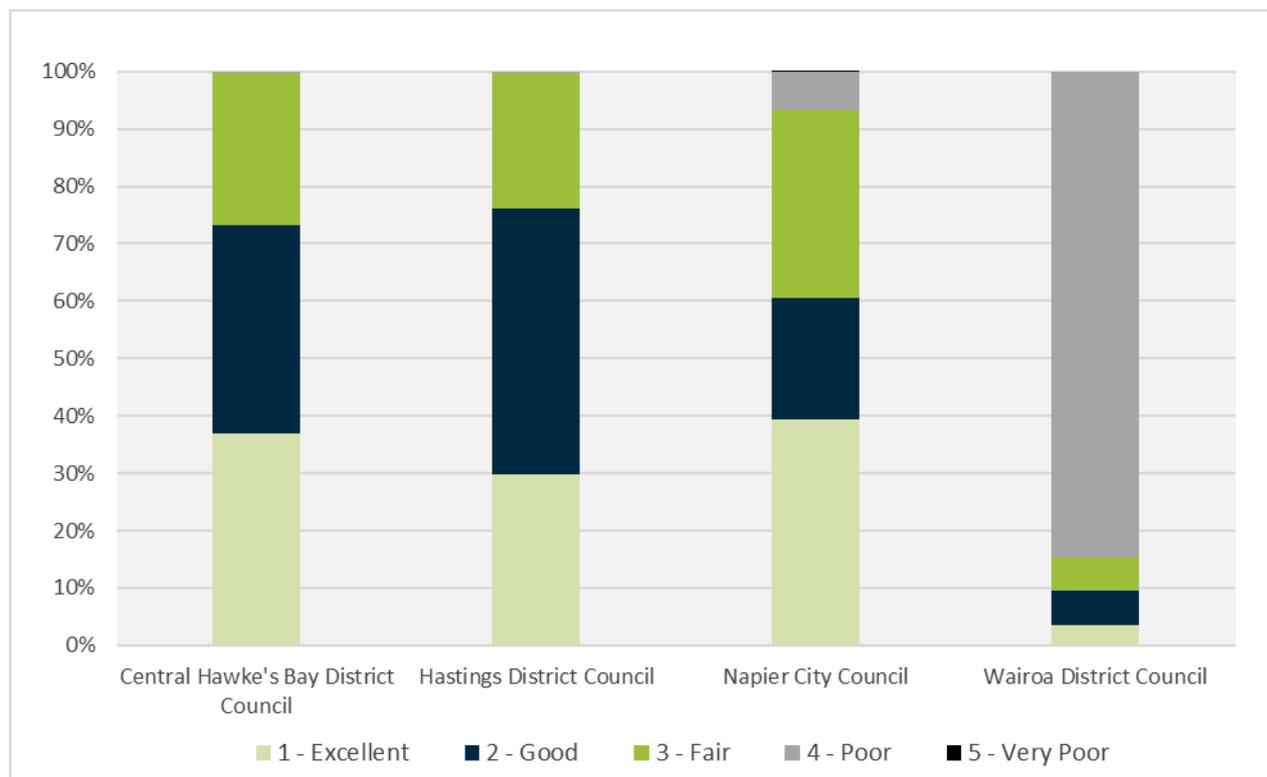


Figure 17 Stormwater pipes inferred condition based on remaining useful life (by value)



Planned future investment

While the current condition of the assets is relevant, the planned future expenditure on the three waters assets is also highly relevant. The review began in 2019 and at that stage each of the Councils had a significant capital expenditure program planned over the life of the 2018-2028 LTPs. The total forecast capital expenditure on three waters at the time was \$313M. As the review has progressed the Councils have updated (2019/20 annual plans) and re-updated (2020/21 annual plans) their forward projections.

Capital expenditure has been compared across the four councils based on the published LTPs updated with current three-year budgets provided by each council. A number of the councils, through the current annual planning process, planned to bring forward some of the capital works that were currently in the outer years of the LTP or added new works. The total capital expenditure for each council across the three waters through to 2027/28 is shown below. That total is now \$387.6M.

- Central Hawke's Bay \$36.6M
- Hastings \$227.2M
- Napier \$106.7M
- Wairoa \$17.1M

The differences, particularly for Napier and Hastings, highlight how quickly councils have started to respond to the impending changes from the three waters reform, the underlying reasons for the reform and the scale of the impact.

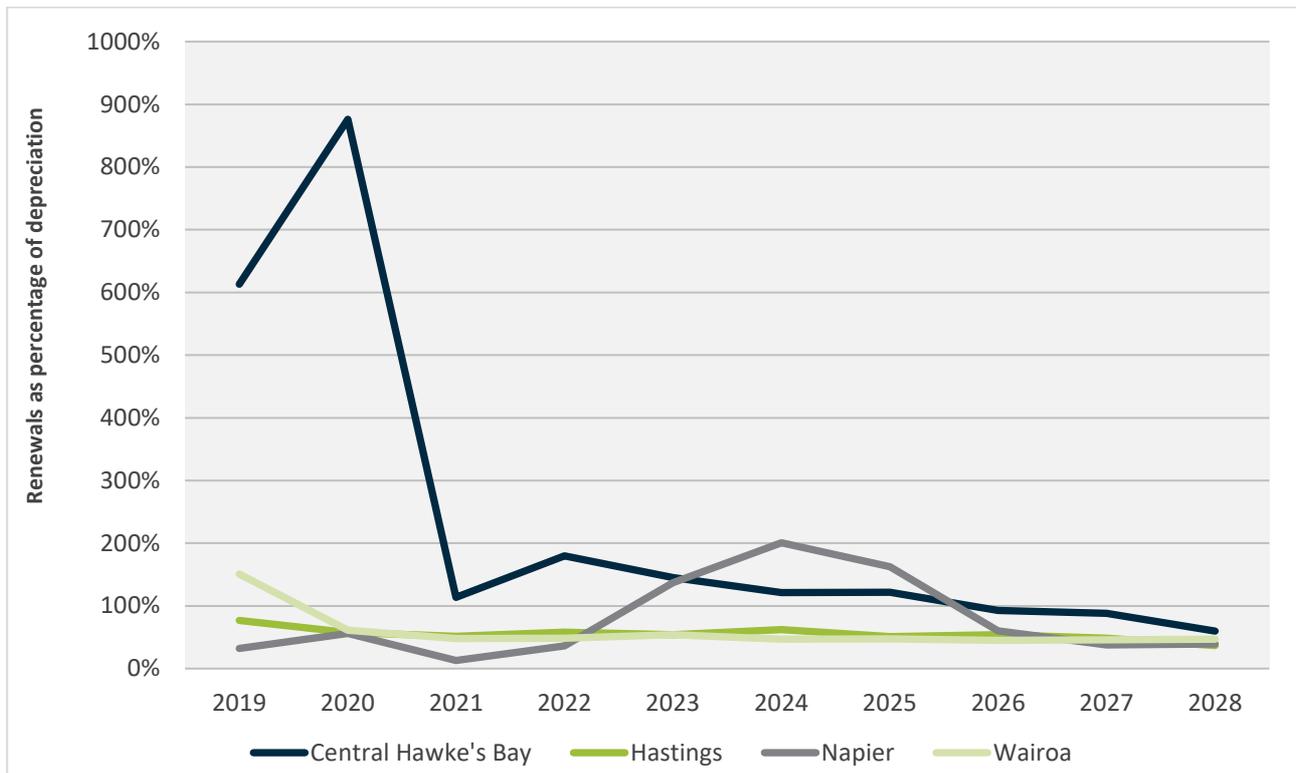
The charts in this section show how the forecast expenditure translates to a per ratepayer basis. Noting that these charts are only for the projected LTP expenditure so the current per capita spend for Napier and Hastings will be significantly higher. The charts highlight the varying level of investment across the region, with Central Hawke’s Bay and Hastings investing the most on a per capita basis in the LTPs, followed by Napier and Wairoa. If that position was adjusted due to the increased expenditure now forecast, then Hastings would be investing the most with Napier and Central Hawke’s Bay next. Wairoa would be some way behind on per capita investment.

We note that the Councils all have different approaches to funding asset renewal and depreciation but for comparative purposes a renewal ratio has been used in the charts below.

The renewal ratio compares renewal expenditure to depreciation for each asset group. While on a year to year basis the ratio is expected to fluctuate, generally a ratio of at or near 100% should be achieved over the longer term. It relies on the accurate categorisation of expenditure.

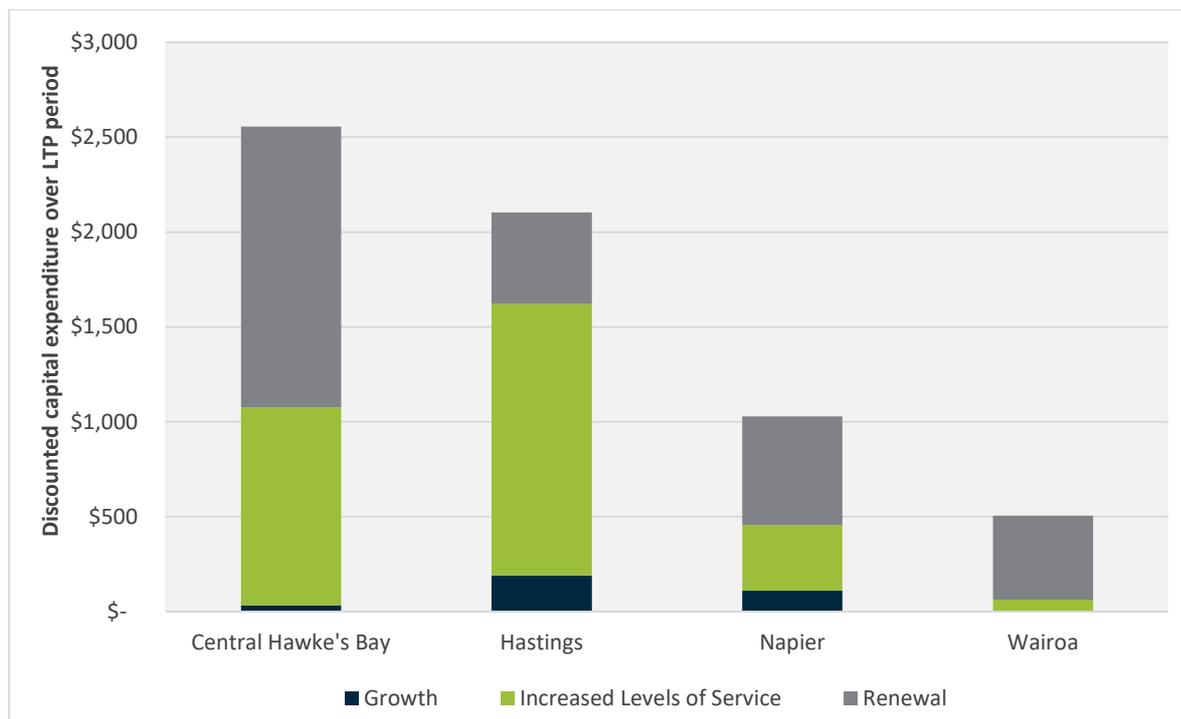
Water

Figure 18 Water asset renewal ratio (LTP)



Planned asset renewals as set out in the LTP, when compared to depreciation of water assets as set out in the LTP were projected to be high for Central Hawke’s Bay over the next five years, with Napier also planning a marked increase in renewals spending during the LTP period.

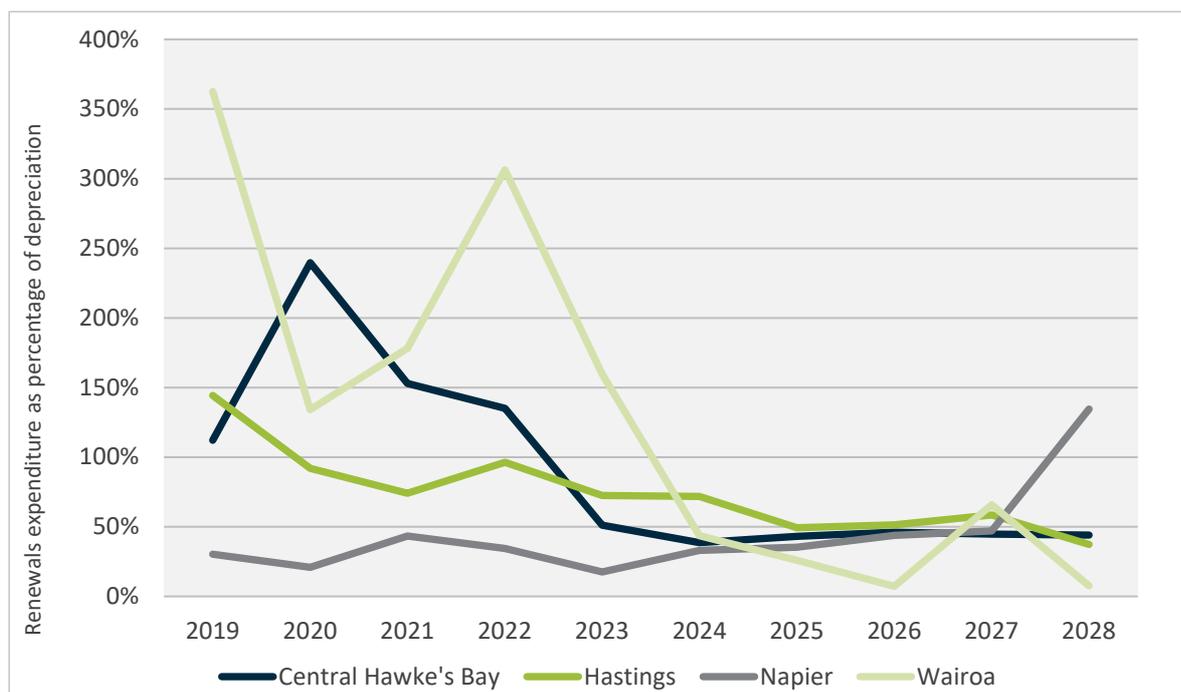
Figure 19 Planned water capital expenditure per ratepayer (LTP¹⁹, NPV 5% discount rate)



Despite low renewals expenditure compared to most of the other Hawke’s Bay councils, Hastings has significant investment planned in assets to increase level of service over the LTP period, aspects of which contribute to renewal. Similarly, almost half of Central Hawke’s Bay’s planned investment in the water assets is directed toward improving levels of service.

Wastewater

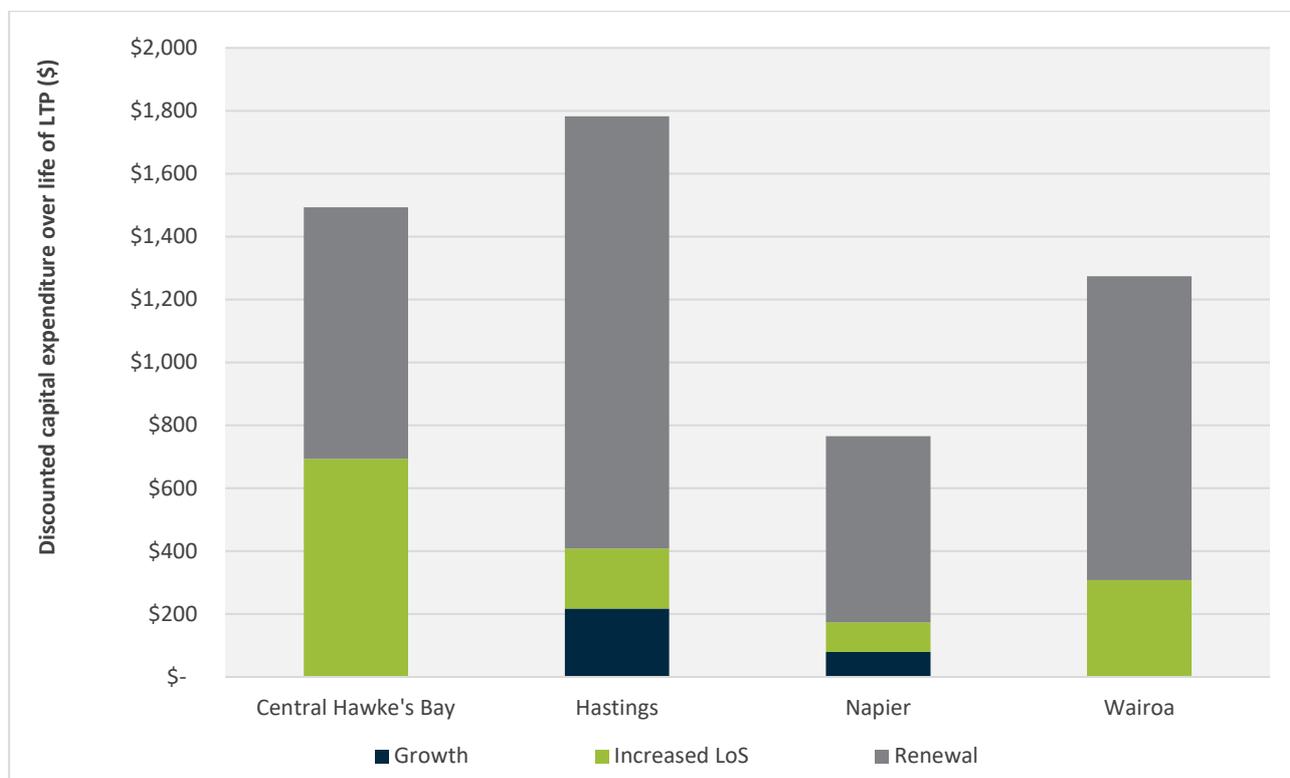
Figure 20 Wastewater renewal ratio (LTP)



¹⁹ Ten-year period, years 2019/20, 2020/21 and 2021/22 from detailed budgets

Analysis of LTP projections for renewals spend and depreciation expense shows significant investment planned in the renewal of wastewater assets in Wairoa and Central Hawke’s Bay over the three to four years. However, reinvestment in wastewater assets in Napier as proposed in the LTP was less than 50% of depreciation cost over the same period.

Figure 21 Planned wastewater capital expenditure per ratepayer²⁰ (2018 LTP, NPV 5% discount rate)²¹



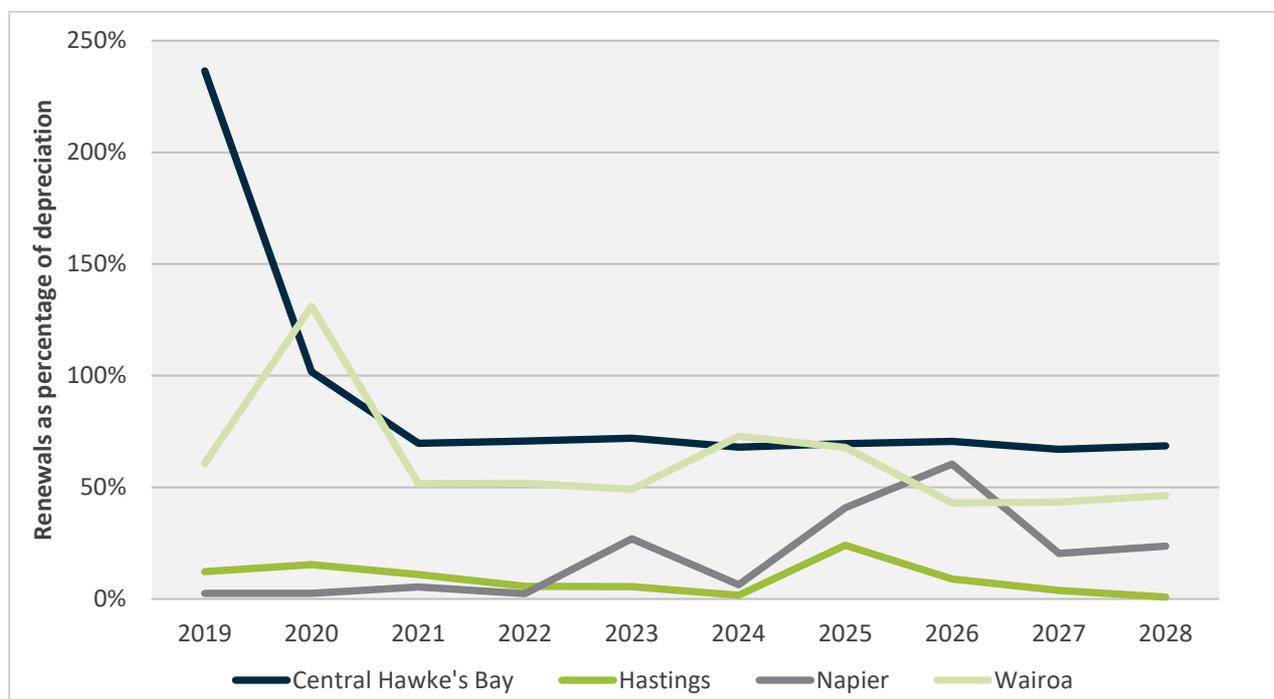
Across all the Councils, renewal of assets was the main driver of capital expenditure within the wastewater activity as set out in the LTP due to increasing compliance requirements. However, given differences in scale between Central Hawke’s Bay and Hastings, it is interesting to note the comparatively high investment in assets to increase levels of service in Central Hawke’s Bay. This reflects meeting compliance requirements and is not directly related to population size.

²⁰ Ten-year period, years 2019/20, 2020/21 and 2021/22 from detailed budgets

²¹ LoS – Levels of Service

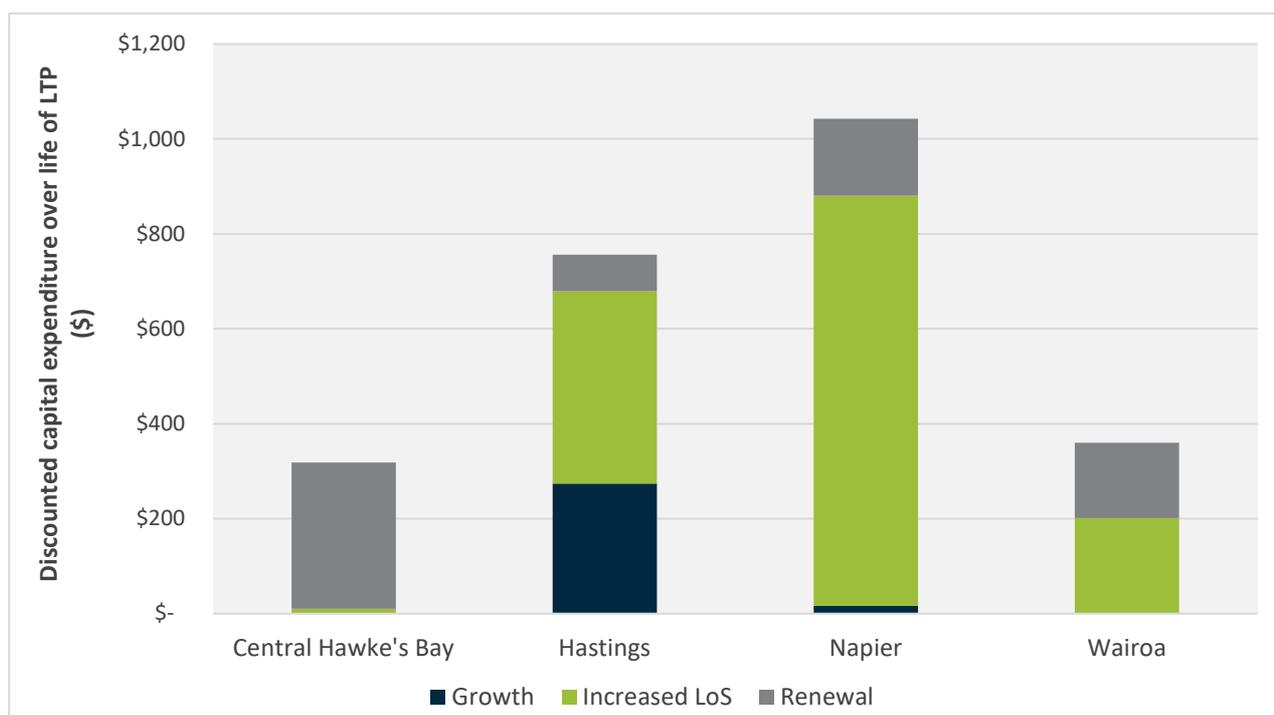
Stormwater

Figure 22 Stormwater renewal ratio (LTP)



Planned reinvestment in the stormwater network is low across the entire region based on the LTP projections, with reinvestment typically remaining well below the rate of depreciation. This is consistent with trends across all New Zealand councils.

Figure 23 Planned stormwater capital expenditure per ratepayer²² (LTP, NPV 5% discount rate)²³



²² Ten-year period, years 2019/20, 2020/21 and 2021/22 from detailed budgets

²³ LoS – Levels of Service

Hastings, Napier and Wairoa are all investing quite heavily in increasing levels of service and/or growth for stormwater.

Additional future costs

We have been asked to consider what additional future costs if Council forecasts are adjusted for the expected regulatory reform and associated increased community expectations. These additional costs will drive operational cost increases to meet new compliance requirements and capital investment to upgrade infrastructure to meet the higher standards. This has been referred to as the enhanced status quo throughout this report.

In order to estimate what these additional costs could be we have relied on cost estimates prepared for DIA for nationwide upgrades to meet new drinking water standards and the National Policy Statement for Freshwater Management and marine discharge standards²⁴ and these provide cost estimates for each council for capital upgrades and increased operating costs.

We have also added increased operating costs to make an allowance for increased compliance costs recognising the increased compliance activity (and therefore cost) that Hastings has incurred since the Havelock North incident. While we recognise all councils have responded we note that Water NZ in their latest benchmarking study reported:

*“Only four participants [out of 46] provided a response suggesting they were actively engaged in any regional council processes for protecting source water, and the only comprehensive response was provided by Hastings District Council. It appears, therefore that the Havelock North enquiry findings have catalysed an improvement in that district but that the learnings have not translated into action in other jurisdictions”.*²⁵

The estimates outlined above increase the total capital programme for the LTP period from the original \$313 million to \$605 million across the region

We note that other councils also report being impacted by these cost increases and that in the 2018/19 Water NZ Annual Performance Review a substantial increase in staff over recent years was reported. The number of internal staff and contractors employed by repeat participants from 2016 through to 2019 shows an increase over that time of 23% for internal staff and 86% for contracted staff²⁶. While we note that not all of the increases in all situations can be solely attributed to responding to increased levels of compliance, but the scale is similar to Hastings. However, we have still used Hasting as the benchmark for assuming increased costs for compliance for all the councils.

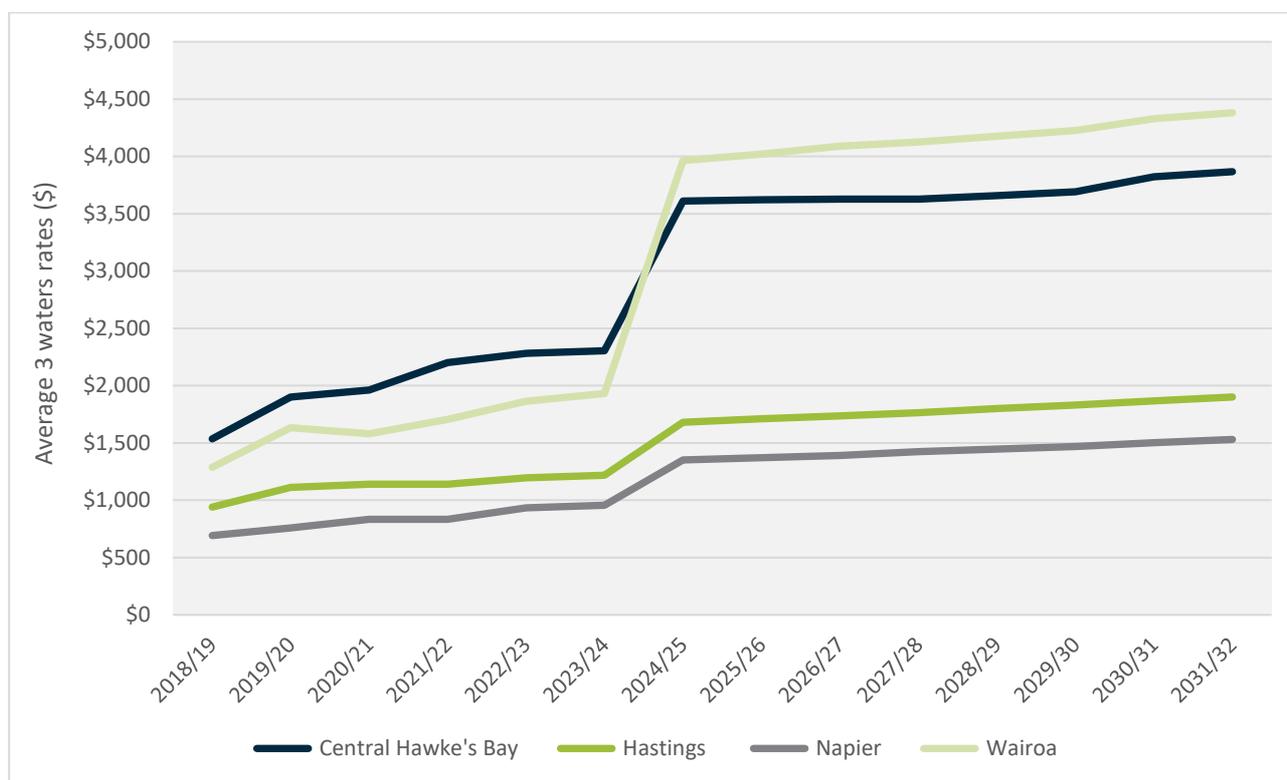
The impact of these additional allowances is shown in the following chart. This highlights the future cost increases that all the Councils may face and in particular for Central Hawke’s Bay and Wairoa. This enhanced status quo position has been used throughout the review as the basis against which to assess the different options. It is important to highlight that the enhanced status quo does not include an additional allowance for upgrades to stormwater over and above that allowed for by each council. There is too much uncertainty over what any new standards might be and what would be required to meet those for this to be included. The risk that investment required is greater than forecast is highlighted throughout the report including analysis of how the options address that risk.

²⁴ Work undertaken by Beca and GHD

²⁵ Page 18, Water NZ Annual Performance Review

²⁶ Ibid

Figure 24 Enhanced status quo: estimated future costs (average three water residential rates)



When considered using the same affordability measure introduced in the analysis of the current costs, the full impact of the enhanced status quo is shown below at the end of the modelling period. This shows that in Central Hawke’s Bay and Wairoa unaffordability has increased significantly, with Wairoa now over the 5% threshold.

Table 9 Estimated average three waters residential rate enhanced status quo (2032)

	Central Hawke’s Bay	Hastings	Napier	Wairoa
Average three waters residential rate	\$3,867	\$1,901	\$1,531	\$4,380
Affordability of water and wastewater ²⁷	4.4%	1.9%	1.5%	5.9%

Similarity of challenge

Where there are significant differences between the Councils there are also many similarities. Some of these are set out in the Councils’ 30-year infrastructure strategies and highlighted through the current state assessment set out in **Appendix G**. In addition to this, all the communities of Hawke’s Bay face a common challenge of funding the expected costs arising in the future for the three waters. These are not only those which are known, quantified and set out in each council’s LTPs but also those which are anticipated as arising from the expected reform of the regulatory regime by the Government.

²⁷ GST inclusive two waters rate as a percentage of household income. Relies on 2018 Census data for household income by council area with Morrison Low projections of future values.

Figure 25 Key themes for three waters (from 30-year infrastructure strategies)



Given that the Councils face similar issues, then addressing these challenges in a coordinated way that eliminates duplication and ensures that all councils and their communities have access to the appropriate strategic capacity and capability to do so should be the desired goal.

Different approach to service delivery

Currently, however, the four councils have different approaches to delivering the three waters services with regional activities driven by specific projects and actions rather than a coordinated approach. This project was initiated to seek to identify if there was a better approach for the region.

The number of employees directly involved in delivering water services varies from less than ten in Central Hawke’s Bay and Wairoa to 70 FTEs at Napier where City Services staff undertake the operational work. This represents the differences both of the size of each council’s three waters network and the service delivery model utilised at each council as illustrated in **Tables 10** and **11**.

Table 10 Internal delivery of three waters services

	Central Hawke’s Bay	Hastings	Napier	Wairoa
Asset management	Across all assets	Dedicated three waters	Across all assets	Across all assets
Capital projects	Dedicated three waters	Dedicated three waters	Across all assets	Across all assets
Operations	Dedicated three waters	Dedicated three waters	Dedicated three waters	Dedicated three waters

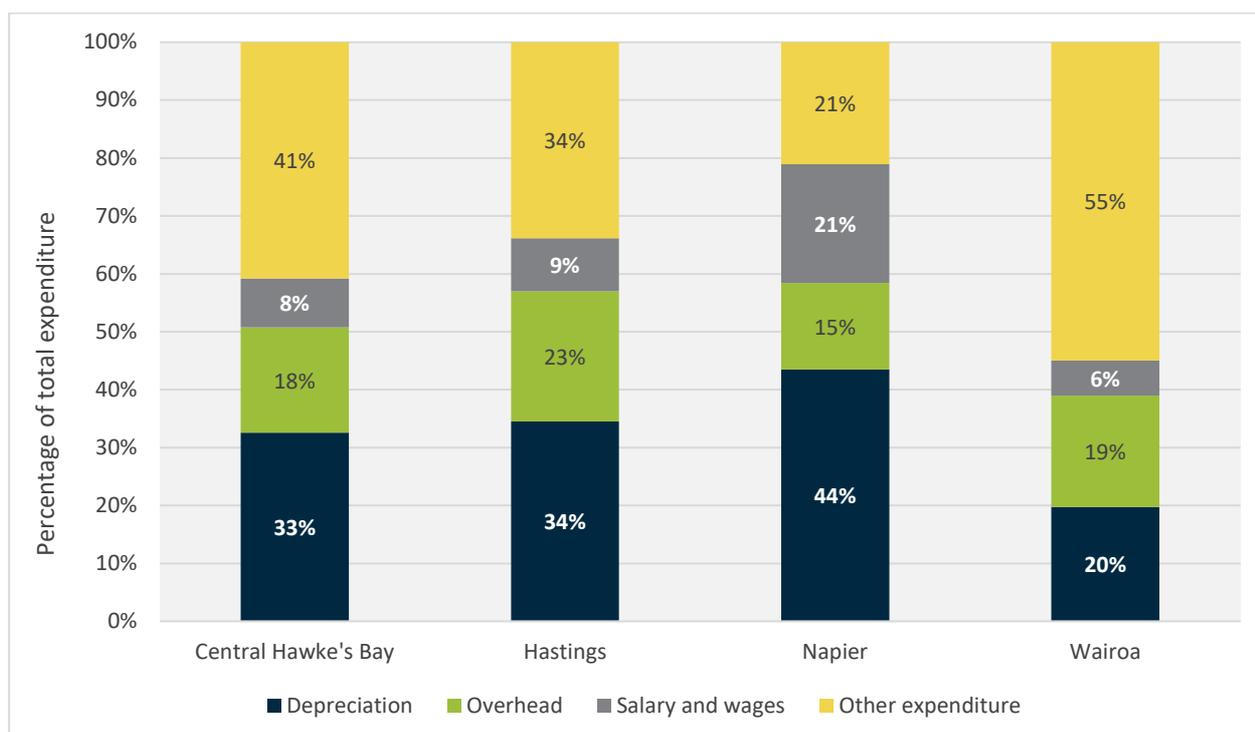
Table 11 Extent of in-house delivery and outsourcing for three waters

	Central Hawke's Bay	Hastings	Napier	Wairoa
Reticulation O&M	Outsourced	Outsourced	In-house with specialist contract support	Outsourced
Treatment O&M	Outsourced	In-house with contract support	In-house with specialist contract support	In house
Professional services	Outsourced on an as required basis	Design/project management largely outsourced	In-house with specialists contracted as required	Outsourced on an as required basis

If a regional approach is adopted, then there will be opportunity to rationalise the contracts, as Wellington Water has recently done for example. However, that would not be able to be implemented until at least the end of 2026 when contract renewal dates could be aligned. There would also be an opportunity to maximise the use of the internal strategic and technical capability and capacity of Hastings and Napier across the region to support the smaller councils where virtually all aspects of the three waters services are outsourced.

The different approaches of the Councils are also demonstrated in the breakdown of Councils' operational cost for three waters. Napier, with a higher reliance on internal staff, spends a much higher proportion on staff than the other councils. The following graph highlights depreciation as a small cost proportionally for Wairoa. We have compared the rates of depreciation being used by the Councils. Wairoa has a comparatively low rate of depreciation for wastewater and stormwater but the highest of the group for water. This tends to indicate that it is not that depreciation is less of a cost for Wairoa, but that other operational expenditure is proportionally higher than the other councils.

Figure 26 Breakdown of three waters expenditure (2018 LTP)



Capacity and capability

Capacity and capability gives an organisation an appropriate level of expertise and resilience. In relation to three waters an organisation needs strategic, technical, and operational capacity and capability. Strategic capacity is important to ensure good long-term asset investment decisions are made.

There are already shortages of three waters resources across New Zealand with Water NZ reporting vacancies of 10% across the country in the 2018-2019 Annual Performance Review. Currently the Councils effectively compete for these scarce resources.

The four councils have different approaches to developing strategic capacity with Wairoa and Central Hawke's Bay largely contracting that in through consultants and contractors. Whereas Napier largely uses internal resources and Hastings a blend of both. However, as part of the initial review, each council was asked to identify, for each of the three waters separately, the major priorities and challenges. The trend across these was for Central Hawke's Bay and Wairoa's challenges and priorities to be more operational, whereas Hastings and Napier's issues were more strategic. In our view this indicates the differences in the capability and capacity of the Councils.

External debt

There is a wide variation in the Councils' approach to managing and using debt. The current position of three waters debt and revenue is shown in **Table 12** where the major difference is between Napier and the other councils, where debt is not used to the same extent as the other councils, is highlighted. Over the period of the LTP, all the councils remain within the Local Government Funding Agency limits at a whole of council level.

Differences in the use of debt highlights key differences in each council's approach toward funding and financing the purchase of new infrastructure assets.

We have not made any judgements on the approach of any of the Council's use of debt but note that when considering regional service delivery models, finding a way to balance the different debt levels and approaches to debt of the Councils can be challenging.

Table 12 2019/20 Three waters debt

	Central Hawke's Bay	Hastings	Napier	Wairoa
Total debt	\$22.8 million	\$116.7 million	\$10.9 million	\$7.5 million
Average loan term	18 years	25 years	25 years	24 - 45 years
Debt to asset ratio²⁸	23 %	18.8 %	2.9 %	18.2 %
Interest cost per annum	\$823,000	\$3,949,000	\$862,000	\$109,000
Interest to revenue²⁹	11.4 %	15.9 %	4.5 %	3.2 %

²⁸ 2019/20 total projected debt divided by 2019/20 project net book value of infrastructure assets

²⁹ The LGFA limit on borrowing for this ratio is 20% across a council's entire business